

Generic Risk Assessment

Title/ Description	Heavy (Adverse) Weather Encounter					GRA. No	FS-01-IMS03-001-B-004		
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS13-001 - Bridge Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Vessel preparation for adverse weather navigation	H – Lack of awareness H – Inexperienced crew H- Inadequate vessel preparation H – Inadequate weather forecast H – Human factors H – Work organization and social factors E – Equipment / vessel damage E – Injury E – Fatigue	Personnel on board	3	C	C3	1. Consider route deviations to avoid or minimise adverse weather encountered (S) 2. Consider identification of ports of refuge or shelter areas (S) 3. Organise battening down of complete vessel (En) 4. Check sea fastening of equipment and reinforce if required (En) 5. Follow adverse weather procedure (A) 6. Obtain and Monitor weather forecasts (A) 7. Brief crew about adverse weather and appropriate behaviour (A) 8. Essential personnel in full awareness of reduced capabilities (A)	2	C	C2

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						9. Restriction on use of dedicated spaces such as Gym, warning sign posted. (A) 10. All personnel involved to comply with cultural awareness and no harassment policy (A) 11. Be aware of crew capabilities, limitations and other personal characteristics of each crewmember related to bad weather navigation, and if possible, arrange work on board accordingly (A) 12. If possible, reduce workload before bad weather. Comply with work and rest hours. (A)				
Emergency preparedness for potential emergency situation (including Bad weather, poor visibility, insufficient	H – Fire Emergencies H – Health Emergencies H – Nautical Emergencies H – Environmental Emergencies H – Equipment Failure Emergencies	Personnel on board	4	C	C4	Control measures 1 to 12, as applicable 13. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)		4	A	A4

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manning, capsize, sinking)	H – Search and Rescue - SAR - Emergencies E – Death E – Injury/illness of personnel E – Damage to vessel E – Loss of vessel E – Damage to 3rd party property					14. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 15. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 16. Emergency contacts available (A) 17. Emergency equipment is available and maintained as per PMS (A)			
Heavy (adverse) weather navigation	H – Ingress of water H – Loss of stability H – Loss of Power H – Loss of propulsion H – Unwell feeling, restricted capabilities of personnel H – Dehydration H – Insufficient meals prepared/ consumed H – Loss of equipment to sea E – Fatality E – Loose parts, body impact and injury.	Personnel on board	4	C	C4	Control measures 1 to 12, as applicable 18. Galley equipment secured and food preparation limited to what is possible considering ship movement. (S) 19. Outdoors/ exposed areas, restricted as per Master orders. (I) 20. Vessel speed and course to be adjusted to limit weather effects (En) 21. Backup power supply available and tested (En)	4	A	A4

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	E – Pinch points. E – Slips, trips & falls E – Spills / oil pollution E – Vessel equipment damage E – Financial loss					22. Anti-slip painting on deck (as applicable). (En) 23. Observation camera's with monitors on Bridge (if equipped). (En) 24. Onboard Medical facilities on standby, seasickness' pills distribution, as required (A) 25. Monitor secured equipment and improve lashings if required (A)			
Heavy (adverse) weather in port	H – Ingress of water H – Loss of stability H – Loss of Power H – Unwell feeling, restricted capabilities of personnel H –Dehydration H – Insufficient meals prepared/ consumed H – Damage to mooring line/ equipment H – Vessel contact with quay/berth	Personnel on board	4	C	C4	Control measures 1 to 12, as applicable 26. Consider shifting vessel to anchorage or shelter area (S) 27. Galley equipment secured and food preparation limited to what is possible considering ship movement. (S) 28. Outdoors/ exposed areas, restricted as per Master orders. (I) 29. Backup power supply available and tested (En)	4	A	A4

Title/ Description	Heavy (Adverse) Weather Encounter					GRA. No	FS-01-IMS03-001-B-004		
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	E – Fatality E- Loose parts, body impact and injury. E – Pinch points. E – Slips, trips & falls E – Spills / oil pollution E – Vessel equipment damage E – Financial loss E – Loss of reputation					30. Anti-slip painting on deck (as applicable). (En) 31. Additional mooring lines, fendering (En) 32. Consult Port Master instructions or advices (A) 33. Onboard Medical facilities on standby, seasickness' pills distribution, as required (A) 34. Monitor secured equipment and improve lashings if required (A)			
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Control of Substances Hazardous to Health (COSHH)					GRA. No	FS-01-IMS03-001-B-005		
Reference Source	Code of Safe Working Practices for Merchant Seafarers	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work - Control of Substances Hazardous to Health (COSH)			Life Saving Rule	Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Use of Substances Hazardous to Health	H – Contact with substance H- Incorrect use of substance H – Adverse release of substance H – Untrained personnel H- Poor mental health of crew involved H- Unfavourable work environment (stress, victimisation, etc.) E – Injury E – Fire E – Explosion E – Environmental Spill E - Contamination	Personnel on board	4	D	D4	1. Any chemical substance without a label shall not be used (E). 2. Use only least hazardous substances (S). 3. Adequate first aid and fire-fighting equipment available and close to the worksite (En). 4. Close scuppers if applicable (En) 5. All substances supplied on board shall have SDS available to users in the vessel's working language (A). 6. COSHH assessment for all substances on board (A). 7. COSHH procedure to be adhered to (A).	3	B	B3

Title/ Description		Control of Substances Hazardous to Health (COSHH)				GRA. No	FS-01-IMS03-001-B-005		
Reference Source	Code of Safe Working Practices for Merchant Seafarers	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work - Control of Substances Hazardous to Health (COSHH)		Life Saving Rule		Line of Fire		
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						8. All personnel involved to comply with cultural awareness and no harassment policy (A) 9. All crew involved shall be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Every crew member has the right to refuse to work with Substances Hazardous to Health, comply with speak up policy (A) 12. Use, handle and store substances as described in SDS and COSHH assessment (A). 13. Ensure compatibility when multiple substances are used (A)			

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						14. Follow strictly the smoking regulations on board (A). 15. No smoking, eating and drinking while using hazardous substances (A). 16. Spill containment kit available and close to worksite (A). 17. Chemical waste disposal controlled (A). 18. IMDG Code available onboard, as required when carrying dangerous goods in bulk (A). 19. Provide proper training in use of substances, SDS and COSHH assessment, including wearing and removing PPE (A). 20. When finishing using the hazardous substances clean hand and PPE used (A). 21. Provide proper supervision during the work (A).			

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						22. Familiarization with use of eye wash station (A) 23. 'Stop the Job' Policy (A). 24. Use SLAM before the work starts (A). 25. Use of PPE as per PPE Matrix and as stated on the SDS (PPE).			
Emergency preparedness for potential emergency situation (Fire, Contaminations, burns, poisoning, skin irritations, eye irritations)	H – Fire Emergencies H – Health Emergencies H – Environmental Emergencies H- Incorrect use of substance H – Untrained personnel E – Death E - Injury/illness of personnel E – Damage to vessel E – Damage to 3rd party property	Personnel on board	4	C	C4	26. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 27. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 28. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 29. Emergency equipment is available and maintained as per PMS (A)	4	A	A4

Title/ Description	Control of Substances Hazardous to Health (COSHH)					GRA. No	FS-01-IMS03-001-B-005		
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Storage of Substances Hazardous to Health	H – Incorrect substance storage H – Adverse release of substance H – Contact with substance E – Injury E – Fire E – Explosion E – Environmental Spill	Personnel on board	4	C	C4	30. Following storage requirements and segregate incompatible substances as required as per procedures and SDS (I). 31. Product shall be put in quarantine in case no SDS available (I). 32. Designated COSHH locker available onboard, well-lit and ventilated (En). 33. Storage facility to be provided and maintained with suitable fire detection and suppression system (En). 34. Restrict the access to the substance to authorised personnel only (A). 35. If signs of leakage are present effort to be made to repack the container (A). 36. Storage space to be regularly inspected (A).	3	B	B3

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						37. PPE as per PPE matrix available at the storage location (PPE).				
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Iris de Vos (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	00		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006		
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Line of Fire	
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Berthing / Unberthing Mooring- Preparations	H- Misunderstanding procedures. H – Communication barrier H – Improper planning H- Slips and Trips H: Poor mental health of crew involved H: Unfavorable work environment (stress, victimization, etc.) H- Fatigue E – Injury/illness of personnel E – equipment damage	Personnel involved in the work	3	C	C3	1. Mooring lines laid out to prevent entanglement and contact with obstructions (I) 2. Use certified and maintained equipment as per PMS (En) 3. Establish proper communications between forward, aft stations and bridge. If hand-held VHF are used, ensure backup batteries are charged and readily available. If applicable, other back up communications to be made ready (En) 4. Prime and test hydraulic lines and winches, especially in cold weather (En) 5. Emergency stops in good condition and tested (En).	2	B	B2

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006			
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS14-001 Deck Procedure		Life Saving Rule		Line of Fire	
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						6. Toolbox meeting to instruct and discuss task steps and procedure requirements (A) 7. Form appropriate mooring teams with adequate combination of competencies and experience (A) 8. All members of mooring team to be fit for work(A) 9. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 10. All personnel involved to comply with cultural awareness and no harassment policy (A) 11. Plan work schedule and regular breaks, comply with work and rest hours (A) 12. Comply with speak up policy (A) 13. Inspect mooring station (A) 14. Inspect mooring ropes and equipment in good order and meet requirements (A)				

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006		
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						15. Anchor ready for emergency release (A) 16. Provide proper supervision during the work (A) 17. Consider weather forecast for the planned duration of the operation and determine if safe to carry on with operations (A) 18. Berthing plan and mooring configuration discussed with pilot, shore gang (A) 19. All involved to use proper PPE in accordance with PPE matrix (PPE) 20. Use of PFD and lifeline, as required (PPE)			
Emergency preparedness for potential emergency situation (Mooring Equipment failure, Blackout, Collision, pollution, etc.)	H-Mooring equipment failure H- Slips, trips & falls H-Damaged/ parting of mooring line E - Spills / oil pollution E-Death E – Injury E- Damage to 3 rd party property	Personnel involved in the work	4	C	C4	21. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 22. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 23. Crew to be trained to respond to emergency by participating in	4	A	A4

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006		
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						drills as per drill matrix and planned jobs (A) 24. Emergency equipment is available and maintained as per PMS (A)			
Berthing / Unberthing Mooring-Operations	H- Brake Failure H- Hydraulic failure. H- Pinch points H- Slips, trips & falls H- Unfamiliar crew H- Damaged/ parting mooring line E- Loose parts, body impact and injury. E- Spills / oil pollution E- Fatality E-vessel equipment damage	Personnel involved in the work	4	C	C4	Control measures 1 to 20 as applicable. 25. Snap-back zones identified (I) 26. Rotational parts covered. (I) 27. Area out of limits to personnel not involved in operations. (I) 28. Stoppers in use to be of the same material as the lines. (En). 29. CCTV camera’s with monitors on Bridge (if equipped). (En) 30. Check that mooring lines are appropriately tensioned (En) 31. Anti-slip painting on deck. (En) 32. Apply appropriate tension on mooring lines (En) 33. Use SLAM before starting the operations. (A). 34. Mooring lines paid out as per Master’s orders (A).	3	B	B3

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006		
Reference Source	ICS Bridge procedures guide		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						35. Handle mooring lines correctly without placing yourself or team members in danger (A). 36. Always maintain operational awareness and focus on the task (A).			
Securing of mooring station after berthing	H- Pinch points H- Slips, trips & falls H- Unfamiliar crew H- Damaged/ parting mooring line E- Loose parts, body impact and injury. E- Fatality E- Vessel equipment damage	Personnel involved in the work	4	C	C4	37. Rat guards in place for each mooring line (En) 38. Ensure winch breaks are fast and winch de-clutched (En) 39. Switch off all hydraulics after completion (En) 40. Proper housekeeping of mooring stations are carried out (A) 41. Anchor secured after arrival (A)	3	B	B3
Securing of mooring station after unberthing	H- Pinch points H- Slips, trips & falls H- Unfamiliar crew E- Injury. E- Vessel equipment damage	Personnel involved in the work	2	C	C2	42. Switch off all hydraulics after completion (En) 43. Check that mooring lines are secured for sea voyage, (A) 44. Proper housekeeping of mooring stations are carried out (A) 45. Ensure anchor is secured for sea voyage (A)	2	B	B2

Title/ Description	Berthing / Unberthing, Deck Mooring Lines Handling					GRA. No	FS-01-IMS03-001-B-006			
Reference Source	ICS Bridge procedures guide	IMS Procedure	FS-01-IMS14-001 Deck Procedure		Life Saving Rule		Line of Fire			
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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Assessor's Name(s)		Reviewers Name(s)			Date	1 Sept 2022	Time	08:00		
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	00		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Power Tools - General Operations with Hand and Power Tools					GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule	Line of Fire				
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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General preparation and equipment selection for working with hand and power tools	H – use of defective equipment H – unfamiliar with equipment H – inappropriate equipment selected for job H- inadequate housekeeping/storage of tool H Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H - Fatigue	Personnel working with tools	3	C	C3	1. Remove from service if broken, refer to Lock out / tag out procedure (E) 2. Comply with manual handling limits, all equipment and work-related articles (tools, materials etc) shall not exceed an individual's capacity to lift and carry (E) 3. Emergency stops where fitted are identified and easily accessible by the operator. (E) 4. Use bench support power tools where possible, instead of hand held (S)	2	B	B2

Title/ Description	Power Tools - General Operations with Hand and Power Tools						GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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	E – equipment damage E – inadequate work output E – Injury / Illness					5. Trailing electrical leads to be placed without presenting an obstacle/hazard to access routes. (En) 6. Use only fit for the purpose tools (En) 7. Tools suited for the environment, e.g. low voltage in confined spaces, intrinsically safe in explosive atmosphere (En) 8. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 9. All personnel involved to comply with cultural awareness and no harassment policy (A)				

Title/ Description	Power Tools - General Operations with Hand and Power Tools						GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
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						10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Comply with speak up policy (A) 12. Use only certified and maintained tools (A) 13. Use electrical tools tagged for PAT (A) 14. Follow procedure Hand and power tools and portable electronic devices (A) 15. Check on safety and good working order before use. Check expiry dates – if applicable (A) 16. Monthly safety inspection including hand and power tools (A) 17. Strictly follow the manufacturers' instructions (A)				

Title/ Description	Power Tools - General Operations with Hand and Power Tools						GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
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						18. Keep all safety devices and guards fully operational (A) 19. Always attach safely tools when working overhead (A) 20. 'Stop the Job' Policy (A) 21. Use SLAM before starting the job (A) 22. HSSE observation card (A) 23. Operator trained or familiar in the use of equipment. (A) 24. Toolbox talk, where required (A) 25. Tools and associated accessories inspected before use and on completion of work. (A) 26. If work is carried out with contractors provided tools, equipment assurance procedure to be followed (A) 27. Use appropriate PPE as per PPE Matrix (PPE)				

Title/ Description	Power Tools - General Operations with Hand and Power Tools					GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule	Line of Fire				
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Emergency preparedness for potential emergency situation (Equipment failure, Blackout, Fire, electrical shock, Injury, etc.)	H – Equipment failure H – Damaged tools H – Crew incompetent for task E - Injury E – Death E – Damage to vessel E – Damage to 3 rd party property E – Fire E – Blackout	Operators, Personnel in the area	4	C	C4	28. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 29. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 30. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 31. Emergency equipment is available and maintained as per PMS (A)	4	A	A4
Preparation for working with portable power tools: Noise and Vibration	H - Noise H - Vibration E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration)	Operators, Personnel in the area	3	C	C3	32. Isolate work area to prevent noise or vibration exposure, as required (I) 33. Noise exposure levels to be monitored by site supervisors. (A) 34. Work share/rotation of task is recommended to reduce	2	B	B2

Title/ Description	Power Tools - General Operations with Hand and Power Tools					GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire		
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	syndrome), white finger, etc.					individual exposure to noise (and vibration). (A) 35. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 36. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 37. Provision of training/ awareness to employees. (A) 38. Planning of tasks including suitable breaks from noise/vibration exposure (A) 39. Specific PPE is supplied and shall be used where appropriate. (PPE)			
Work with hand and power tools that have rotating	H – Tools with inadequate guarding/entanglement	Personnel working with tools	4	C	C4	Control measures 1 to 27 as applicable	3	B	B3

Title/ Description	Power Tools - General Operations with Hand and Power Tools					GRA. No	FS-01-IMS03-001-B-007		
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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and / or moving parts	with rotating or moving parts of tool H - Incorrect use or selection of tools or attachments E – Injuries; Bruising, Cuts, abrasions, Fracture, Amputation					40. Remove all loose clothing to prevent entanglement (E) 41. Remove all accessories that could get entangled (E)			
Work with portable pneumatic, hydraulic, and electric power tools.	H – Forces (electricity, pressure, mechanical, etc.) H- Electrical Shock E – Injuries; Burns; Muscle pain; Electric shock; Fatality.	Personnel in the area	4	C	C4	Control measures 1 to 27 as applicable 42. Whip-checks to use (E) 43. All tools for outside work are 110 V rated. (En) 44. All tools and extension leads to be clearly identified with the correct colour code tag (annual inspection / PAT). (A)	3	B	B3

Title/ Description	Power Tools - General Operations with Hand and Power Tools					GRA. No	FS-01-IMS03-001-B-007			
Reference Source	Code of Safe Working Practices for Merchant Seafarers: Chapter 18 – Provision, care and use of work equipment Chapter 20 – Work on Machinery and Power systems		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Hot Works, Welding / Burning / Oxygen Cutting					GRA. No	FS-01-IMS03-001-B-008			
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Hot Work	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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Hot Work – Preparation for work	H: Inadequate job preparation. H: Unaware of the hazards and controls. H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H: Fatigue E: Unidentified hazards and risks	All persons on board	1	C	C1	1. Cold weather, moisture trapped may freeze. Do not thaw equipment with naked flames (E) 2. Assess if hot work can take place in designated space for such work (such as Engine Room Workshop) (I) 3. Inform all persons involved in the work and assign tasks via toolbox meeting (A) 4. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 5. All personnel involved to comply with cultural awareness and no harassment policy (A)		1	B	B1

Title/ Description	Hot Works, Welding / Burning / Oxygen Cutting					GRA. No	FS-01-IMS03-001-B-008			
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Hot Work	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						6. Plan work schedule and regular breaks, comply with work and rest hours (A) 7. Comply with speak up policy (A) 8. Follow and adhere to Hot work procedure (A) 9. Supervision required (A) 10. Follow and adhere to Permit to work procedure (A) 11. Adhere to Life Saving Rule no.5 Hot work (A) 12. Acquire permission port authorities, if applicable (A) 13. Obtain additional PTW if the task is to be performed, amongst others, in confined space, at height, over the side, LOTO, Isolation etc. (A) 14. Monitor weather and ship movement (A) 15. Protect yourself against heat exhaustion (A) 16. Be aware of SIMOPS (A)				

Title/ Description	Hot Works, Welding / Burning / Oxygen Cutting					GRA. No	FS-01-IMS03-001-B-008			
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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						17. ‘Stop the Job’ known to everybody involved (A) 18. Use SLAM before starting with actual work (A)				
Hot Work– Equipment selection	H: Equipment E: Poor quality standards of equipment used	All persons on board	4	C	C4	19. Properly store all cylinders, acetylene and oxygen to be segregated – upright, with protective caps, away from heat, sparks and flames (I) 20. Use PAT tested equipment, maintained as per manufacturer’s instructions, PMS and suitable for marine environment (En) 21. Use only properly certified and maintained equipment for the task including gas detection equipment (En) 22. Protect equipment form potential mechanical damages during storage and operations – sharp edges, corners, heavy objects, etc (En) 23.		3	B	B3

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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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Hot Work - Competence	H: Inadequate operation standards. E: Harm to body E: Fire	Operators	4	C	C4	24. Determine level of supervision required based on competence and experience (A) 25. The operator is familiar with the equipment (A) 26. Only competent, trained, personnel to operate equipment (A)	4	B	B4	
Hot Work – PPE	H: Inadequate selection of PPE. H: Inadequate use of PPE E: Harm to body	Operators	3	D	D3	27. Avoid loose items (getting caught) (A) 28. Select PPE according to PPE manual and matrix (A) 29. Prevent wearing clothes made of synthetic fibers under overalls where a risk of ignition is likely (A) 30. Select correct eye protection protecting eyes from flying particles and from UV and heat radiation (PPE) 31. PPE should be free of grease and oil and other flammable substances (PPE)	2	B	B2	

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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						32. PPE shall be in good condition, shall fit and the user shall be familiar with its use (PPE) 33. Wet coveralls should be dried prior to re-use to prevent possible electrocution (PPE)				
Hot Work – Area preparation	H: Flammable / combustible materials in work area and surrounding areas H: Loose flammable equipment H: Inadequate housekeeping E: Fire/ Explosion	All persons in area	5	C	C5	34. Isolation (LOTO) of systems, including fire detection system, as necessary (I) 35. Work area to be swabbed and tested for Cr(VI) prior to starting. If positive, refer to Hexavalent Chromium-6 Cr (VI) GRA (En) 36. Clear / clean the surrounding areas from combustible materials and / or provide sufficient fire barriers (En) 37. Provide adequate illumination (En) 38. Provide sufficient ventilation (En) 39. If Hot Work is performed on stainless steel or chromed steel alloys, assume that Cr(VI) will		3	B	B3

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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
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						develop as chemical reaction, and refer to Hexavalent Chromium-6 Cr(VI) GRA (A) 40. Restrict access (A) 41. Inspect the working area and the surrounding areas. To be done by a competent person(s) only. Do gas-free test where necessary (A)			
Emergency preparedness for potential emergency situation (Equipment failure, Fire, electrical, shock, Injury, etc.)	H – Area of work not prepared for hot work H- Flammable materials and ignition sources H – Lack of information's E – Fire E – Explosion E – Death E – Injury E – Damage to vessel E – Damage to 3 rd party property	All personnel on board	5	C	C5	42. Prepare firefighting equipment in the area (En) 43. For timber decks: keep the deck covered with water or other fire protection (En) 44. Provide competent fire watch with reliable communication line(s). Consider the use of VHF/UHF radios (En) 45. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	5	A	A5

Title/ Description	Hot Works, Welding / Burning / Oxygen Cutting						GRA. No	FS-01-IMS03-001-B-008		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Hot Work	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						46. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 47. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 48. Emergency equipment is available and maintained as per PMS (A) 49. Monitor the working area and surrounding areas (A) 50. Periodically re-test for vapours during the work (A)				
Execution of Hot Work operations	H: Equipment (gas cylinders, electric arc welding equipment) E: Explosion, fire, E: Harm to body	Operators	4	D	D4	51. Keep Oxygen cylinders away from oils, greases and flammable gasses and with permanent and prominent “No smoking” signs (I) 52. Use guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 53. Use the equipment properly. Attach regulators only to the correct cylinders for which they		4	B	B4

Title/ Description	Hot Works, Welding / Burning / Oxygen Cutting					GRA. No	FS-01-IMS03-001-B-008		
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						are designed. Strictly follow the equipment manufacturer's instructions. (En) 54. Handle all gas cylinders with care – do not hit, drop, expose to forces (En) 55. Thoroughly visually inspect / test the equipment before use (A) 56. Use only the proper materials (e.g. welding rods, etc.) fit for purpose to perform the task at hand (A) 57. Test equipment prior to use and use only calibrated unit for testing presence of flammable vapours by competent person (A)			
Hot work – Tool handling	H: Vibration E: HAVS (Hand Arm Vibration Syndrome)	Operators	3	D	C3	58. Are alternative work methods available? (S) 59. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 60. Select appropriate tools and calculate limits to exposure (A)	2	B	B2

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Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Hot Work	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						61. Be aware of symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 62. Choose suitable equipment with sufficient power for the job (A) 63. Limit duration of the task, take frequent breaks (A)				
Hot work on vessel structure	H: Amendments to vessel structure E: Structural damages	Personnel in the working area, crew	3	C	C3	64. Obtain approval from competent authority (Class society) for the operations (A) 65. Maintain fire watches after completion until such time as risks of fire are eliminated (A) 66. Allow only competent personnel to do the work (A) 67. Change to vessel structure to be managed under MOC (A)		3	B	B3
Electric welding - general	H: Direct current E: Electrocution	Personnel in the working area, crew	4	C	C4	68. Secure workplace, all equipment used back to their storage location (E)		4	B	B4

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Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						69. Limit the direct current output to max. 70 V (code of safe working practices 23.6.1 (En)			
Completion of Hot work	H – Hot surfaces H – Poor housekeeping E – Re-ignition of fire E – Slips and trips E – Injury	Personnel in the working area, crew	4	C	C4	70. Maintain fire watches after completion until such time as risks of fire are eliminated (A) 71. Proper close out of PTW (A)	3	A	A3
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		

Generic Risk Assessment

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels					GRA. No	FS-01-IMS03-001-B-009		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
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Grinding – Preparation for work	H: Inadequate job preparation. H: Unaware of the hazards and controls. H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H: Fatigue H: Inexperienced operator E: Unidentified hazards and risks E: Injuries	All persons on board, Operators	2	C	C2	1. Assess if grinding cannot take place in designated space (such as Engine Room Workshop) (I) 2. Inform all persons involved in the work and assign tasks via toolbox meeting (A) 3. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 4. Determine level of supervision required based on competence and experience of the operator (A) 5. All personnel involved to comply with cultural awareness and no harassment policy (A)	1	B	B1

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						6. Plan work schedule and regular breaks, comply with work and rest hours (A) 7. Comply with speak up policy (A) 8. Follow and adhere to hand and power tools procedure (A) 9. Consider if the work should be done under Hot Work PTW (A) 10. Obtain additional PTW if the task is to be performed, amongst others, in confined space, at height, over the side, LOTO, Isolation etc. (A) 11. Monitor weather and ship movement (A) 12. Be aware of SIMOPS (A) 13. 'Stop the Job' known to everybody involved (A) 14. Use SLAM before starting with actual work (A)			
Emergency preparedness for potential	H – Crew incompetent for task	All persons on board	4	C	C4	15. Prepare firefighting equipment in the area (En)	4	A	A4

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emergency situation (Equipment failure, Blackout, Fire, electrical shock, Injury, etc.)	H: Flammable materials and ignition sources E - Injury E – Death E – Damage to vessel E – Damage to 3rd party property E – Fire E: Explosion, fire, release of forces (compressed gasses, under pressure liquids, etc.) E – Blackout					16. For timber decks: keep the deck covered with water or other fire protection (En) 17. Provide competent fire watch with reliable communication line(s). Consider the use of VHF/UHF radios (En) 18. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 19. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 20. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 21. Emergency equipment is available and maintained as per PMS (A) 22. Monitor the working area and surrounding areas (A)				

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels					GRA. No	FS-01-IMS03-001-B-009		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E = Elimination S = Substitution I = Isolation En = Engineering Controls A = Administration PPE = Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						23. Periodically re-test for vapours during the work (A)			
Grinding Equipment selection	H: Equipment H -Noise H: Use of Equipment H: Vibration E: Explosion, fire, E: Harm to body E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc.	All persons on board	1	C	C1	24. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 25. Use equipment only if PAT tested (En) 26. Equipment selected shall be provided with guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 27. Select the lowest vibration tool suitable for the job (En) 28. Grinding wheel suitable for equipment and within expiry date (En) 29. Protect equipment form potential mechanical damages during storage and operations – sharp edges, corners, heavy objects, etc (En)	1	B	B1

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels					GRA. No	FS-01-IMS03-001-B-009		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
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						30. Thoroughly visually inspect / test the equipment before use (A) 31. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 32. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 33. Use only properly certified and maintained equipment as per manufacturer’s instructions, PMS and suitable for marine environment and for the task (A)			
Grinding – PPE	H: Inadequate selection of PPE. H: Inadequate use of PPE E: Harm to body	Operators	3	C	C3	34. Avoid loose items (getting caught) (A) 35. Select PPE according to PPE manual and matrix (PPE) 36. Prevent wearing clothes made of synthetic fibers under overalls where a risk of ignition is likely (PPE)	2	B	B2

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels					GRA. No	FS-01-IMS03-001-B-009		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
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						37. PPE shall be in good condition, shall fit and the user shall be familiar with its use (PPE) 38. PPE should be free of grease and oil and other flammable substances (PPE)			
Grinding – Area preparation	H: Flammable / combustible materials in work area and surrounding areas H: Loose flammable equipment H: Inadequate housekeeping H: Inadequate guards or barriers E: Fire/ Explosion from sparks E: Injuries	All persons in area	5	C	C5	39. Isolate work area to prevent noise or vibration exposure, as required (I) 40. Clear / clean the surrounding areas from combustible materials (I) 41. Provide sufficient fire barriers around combustible material that cannot be moved away (I) 42. Restrict access (I) 43. Isolation (LOTO) of systems, including fire detection system, as necessary (I) 44. Work area to be swabbed and tested for Cr(VI) prior to starting. If positive, refer to Hexavalent Chromium-6 Cr(VI) GRA (En)	3	B	B3

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels						GRA. No	FS-01-IMS03-001-B-009	
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						45. Provide sufficient ventilation (En) 46. Provide adequate illumination (En) 47. Ensure area is cordoned off and guards in place to prevent accidental falls (En) 48. Inspect the working area and the surrounding areas. To be done by a competent person(s) only. Do gas-free test where necessary (A)			
Grinding Operations	H: Use of Equipment H: Vibration, Noise E: Explosion, fire, E: Harm to body E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc.	All persons on board	4	C	C4	Control measures 1 to 48, as applicable 49. Use guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 50. Maximum trigger times of tools to be complied with in line with Noise and Vibration procedure. (A) 51. Noise exposure levels to be monitored by site supervisors. (A)	3	B	B3

Title/ Description	Power Tools- Grinding / Use of Abrasive Wheels					GRA. No	FS-01-IMS03-001-B-009		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						52. Planning of tasks including suitable breaks from noise/vibration exposure (A)			
Completion of work	H – Hot surfaces H – Poor housekeeping E – Slips and trips E – Injury	Personnel in the working area, crew	3	C	C3	53. Secure workplace, all equipment used back to their storage location (E) 54. Do not leave hot surfaces unattended after grinding is completed (I) 55. Proper close out of PTW, where applicable (A)	2	A	A2
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Manual Handling					GRA. No	FS-01-IMS03-001-B-010		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 10 – Manual Handling		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Manual handling - general	H – Weight, size, shape of objects H – Sharp edges, protruding nails or splinters H – Greasy surfaces H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H: Fatigue E – Injuries	Personnel involved in the work	3	C	C3	1. Avoid manual handling at any time when possible (E) 2. Consider use of mechanical aids, to eliminate or reduce manual handling (S) 3. Consider teamwork or load sharing by multiple people (S) 4. Lighten or break up the load into smaller loads, if possible (En) 5. In case of any size and shape making it unable to be carried easily, and use of mechanical aids is not possible, consider dismantling, or arranging the area for mechanical means of lifting, or other means as possible. In such cases the risk need to be specifically assessed (En)	2	B	B2

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Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 10 – Manual Handling		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						6. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 7. All personnel involved to comply with cultural awareness and no harassment policy (A) 8. Plan work schedule and regular breaks, comply with work and rest hours (A) 9. Comply with speak up policy (A) 10. Strictly follow Manual handling Procedure (A) 11. Consider weight and physical ability of the person to manage the load, in any case limit the weight of load to 23 kg or 50 pounds (A) 12. Manual handling training (A)				

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Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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	H – Adverse Weather conditions E – Injuries	Personnel involved in the work	3	C	C3	13. Consider weather conditions and movement of the vessel (A) 14. Consider route to undertake with the load (A)	3	B	B3
	H – Inadequate Working area E – Injuries	Personnel involved in the work	3	C	C3	15. Consider and remove or manage the characteristics of the working area like (I) a. floor b. space to manoeuvre c. route (length, stairs, thresholds) d. lighting, e. possible obstructions f. Greasy or slippery floor g. SIMOPS along the route 16. For lengthy route inspect before manual carrying the load, if necessary, isolate the route (I)	3	A	A3
	H – Incorrect manual handling techniques H – Fatigue	Personnel involved in the work	4	C	C4	Control measures 1 to 12 17. Allow only personnel to participate that followed the	3	A	A3

Title/ Description	Manual Handling					GRA. No	FS-01-IMS03-001-B-010			
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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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	H – Multiple manual handling lifts H – Slips, trips & falls H – Dropped load E – Injuries E – Fatality E – Damaged equipment E- Financial loss					'Manual Handling Awareness' training (A) 18. Reduce bending, twisting, reaching movements (A) 19. Use proper manual handling techniques: straight back, correct posture (A) 20. 'Stop the Job' Policy (A) 21. Apply SLAM before starting with the job (A) 22. Consider risk of dropped load and minimise heigh of fall of the load (A) 23. Wear appropriate PPEs (PPE)				
Emergency preparedness for potential emergency situation (Injury, damage to equipment)	H – Slips, trips & falls H – Drop of cargo which was manual handled E – Injury E – Damage to equipment E – Damage to 3 rd party property	Personnel involved in the work	3	C	C3	24. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 25. Adhere to FS-01-IMS17-001 Emergency Response Manual (A)		3	A	A3

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						26. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 27. Emergency equipment is available and maintained as per PMS (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Lifeboat drill planning	H – Communication failure H – misunderstanding instructions or procedure H – Unfamiliarity with operations H - Launching without authority permission H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H: Fatigue E – Inadequate execution	Personnel involved	1	C	C1	1. Plan lifeboat launch in favourable weather / sea state (such as in port or sheltered area) (S) 2. Heading of vessel, create leeway (I) 3. Toolbox talk, including discussing safety training manual launching procedures and other applicable requirements (A) 4. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A)	1	A	A1

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium</div> <div>low</div>		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium</div> <div>low</div>
	E: Injuries E: Poor results due to loss of time					5. All personnel involved to comply with cultural awareness and no harassment policy (A) 6. Plan work schedule and regular breaks, comply with work and rest hours (A) 7. Comply with speak up policy (A) 8. Clear task division (A) 9. Define ways of communication (A) 10. Obtain permission from Port Authorities or Control Room of the installation controlling offshore area (A) 11. Follow ship specific procedure and manufacturer manual (A) 12. Comply with MOPO (A) 13. Ensure lifeboat maintenance is up to date with PMS and manufacturer requirements (A)			

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation						GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						14. Use certified equipment (A) 15. Only essential trained crew familiar with ship specific equipment and procedures in the lifeboat during drills (A) 16. Use appropriate PPE as per PPE Matrix (PPE)				
Emergency preparedness for potential emergency situation (Equipment failure, MOB, Capsize of lifeboat, damage to equipment, Loss of lifeboat,etc.)	H – Equipment failure H – Unfamiliar crew E – Loss of lifeboat E – Death E – Injury E – Damage to equipment E - MOB	Personnel involved	4	C	C4	17. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 18. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 19. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A)		4	A	A4

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						20. Emergency equipment is available and maintained as per PMS (A)			
Preparation for launching the lifeboat	H - Movement of vessel H - Accidental boat launch/drop from height H – Slips trips and falls E - Injury E - Equipment damage	Personnel involved	3	C	C3	21. When the release hook is not in the correct position, do not enter the boat (E) 22. Ensure access to lifeboat is clear of obstructions (I) 23. Make sure that all hatches and boat openings are well closed and secured before lowering and hoisting (I) 24. Fall preventive device (hook locking pins or certified strops/slides) in place prior to crew entering the boat (En) 25. Ensure proper lighting available at embarkation location (En)	2	B	B2

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						26. Check fuel level and availability of emergency devices (extinguisher, life jackets etc) (A) 27. Inspect and deploy embarkation ladders appropriately, if applicable (A) 28. Consider using Personal Locating Beacon (PPE)			
Launch of the lifeboat	H - Incorrect launch of lifeboat H - Failure to launch due to lack of maintenance/faulty equipment H – Improper conduct of lifeboat crew E – Injury E – Equipment damage	Launch team Lifeboat crew Vessel Lifeboat	5	C	C5	Control measures 1 to 28, as applicable 29. No personnel inside the boat when lowering and hoisting (E) 30. Use embarkation ladder to access the boat when waterborne (S) 31. Release hook only to be used after lifeboat is fully waterborne (off load) (En) 32. On-load release, if equipped, to be tested: (En)	4	A	A4

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation						GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						<ul style="list-style-type: none">Either, when the boat suspended on pennants (see manufacturer manual)Or with crew inside the boat and boat lifted off the water max 0.5m 33. 'Stop the Job' Policy (A) 34. Use SLAM before starting the job (A)				
Operations with Lifeboat	H - Untrained/unqualified crew operating the boat H - Sudden changes in weather H - Equipment failure E - Injury E - Collision E - Damage	Lifeboat crew Vessel Lifeboat	4	C	C4	Control measures 1 to 20, as applicable 35. Monitor weather conditions (A) 36. Certified crew to operate lifeboat (A) 37. Monitor traffic in vicinity (A) 38. Establish communication with Officer of the Watch (A)		3	B	B3
Recovery of boat	H - Incorrect recovery of lifeboat	Launch team	5	C	C5	Control measures 1 to 28, as applicable		4	A	A4

Title/ Description	Drill-Training - Lifeboat - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-011		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule	Work Authorisation			
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H - Failure to recover the boat due to lack of maintenance/faulty equipment H – Adverse weather developed during drill H - Untrained/unqualified crew operating the boat E - Injury E - Damage	Lifeboat crew Vessel Lifeboat				39. Abort drill and retrieve lifeboat if weather conditions deteriorate (E) 40. Once lifeboat is hooked up, crew to disembark before hoisting back in position (E) 41. Check that the hydrostatic safety pawl has moved to the green area (En) 42. Place back safety pin/devices when lifeboat is in position for recovery (En) 43. Secure the lifeboat when back in position (En) 44. Ensure proper housekeeping is maintained. (A) 45. Monitor weather conditions (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00

Title/ Description						Drill-Training - Lifeboat - Launch & Recovery & Operation				GRA. No	FS-01-IMS03-001-B-011	
Reference Source		Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		FS-01-IMS17-001 Emergency Response Manual FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation		
Tasks		A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk			
		Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating	
Separate the job into individual tasks and record in sequence.		Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)	
Thiha, Irfan Afzal (Initial 2021)			Muru Palaney, Tommaso Perelli (Initial 2021)				Location		FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)			Tommaso Perelli, Muru Palaney (Review 2022)				Approval		Julia Korpak	Date	1 September 2022	
							Next Review date		31 August 2023			

Generic Risk Assessment

Title/ Description	Ballasting / De-Ballasting Operations						GRA. No	FS-01-IMS03-001-B-012	
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation		IMS Procedure	FS-02-SHP-BWMP-001 – Ballast Water Management Plan		Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>
Ballasting and de-ballasting - Planning	H: Poor preparation H: Incorrect stability calculations H: Poor communication, loss of focus on task. H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Loss of Stability E: Flooding E: Structural damage due to pressurised tank	Personnel on board Vessel	3	C	C3	1. Check ballast tank vents to make sure they are clear for outflow/intake of air while loading/discharging ballast to avoid over pressurizing or creating vacuum in tank that could lead to structural damage (En). 2. Tank level sensors to be available and maintained as per PMS (En) 3. Follow Ballast Water Management Plan (A) 4. Person performing task should be fit for work. Take in account	3	A	A3

Title/ Description	Ballasting / De-Ballasting Operations					GRA. No	FS-01-IMS03-001-B-012		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation		IMS Procedure	FS-02-SHP-BWMP-001 – Ballast Water Management Plan		Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						crewmember capabilities, limitations, mental health, physical health limitations. (A) 5. All personnel involved to comply with cultural awareness and no harassment policy (A) 6. Plan work schedule and regular breaks, comply with work and rest hours (A) 7. Comply with speak up policy (A) 8. Prepare ballast sequence/plan of vessels current status including any expected or possible changes to this status during the planned duration of the operation (A).			

Title/ Description						Ballasting / De-Ballasting Operations	GRA. No	FS-01-IMS03-001-B-012		
Reference Source		Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation		IMS Procedure	FS-02-SHP-BWMP-001 – Ballast Water Management Plan	Life Saving Rule		Work Authorisation		
Tasks		A: Hazard		B: Initial Risk		C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						9. Performing Stability calculations with a class approved stability program or stability booklet (A). 10. Personnel involved in ballast operation familiarised with system and work operation (A). 11. Toolbox meeting (A). 12. ‘Stop the Job’ Policy (A). 13. Use SLAM before starting the job (A).				
Emergency preparedness for potential emergency situation (List, Capsize, Structural damage, Pollution, damage to	H – Wrong ballast plan H – Ballast operator mistake E – List E – Capsize E – Death E – Injury E – Pollution	Personnel on board Vessel	4	C	C4	14. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 15. Adhere to FS-01-IMS17-001 Emergency Response Manual (A)		4	A	A4

Title/ Description	Ballasting / De-Ballasting Operations					GRA. No	FS-01-IMS03-001-B-012		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation		IMS Procedure		FS-02-SHP-BWMP-001 – Ballast Water Management Plan	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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equipment, Equipment failure, etc.)	E – Damage to equipment E -Damage to 3 rd party property E -Equipment failure					16. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 17. Emergency equipment is available and maintained as per PMS (A)			
Ballasting and de-ballasting - Operations	H: Equipment malfunction H: Incorrect stability calculations H: Poor communication, loss of focus on task E: Loss of Stability E: Flooding E: Structural damage due to pressurised tank	Personnel on board Vessel	5	C	C5	Control measures 1 to 17, as applicable 18. Regularly monitor tank gauges and where possible take physical soundings (En) 19. Follow ballast sequence as per plan (A). 20. Monitor ballast/de-ballast operations throughout the execution, avoid SIMOPS/distractions (A)	4	A	A4

Title/ Description	Ballasting / De-Ballasting Operations					GRA. No	FS-01-IMS03-001-B-012		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation		IMS Procedure	FS-02-SHP-BWMP-001 – Ballast Water Management Plan		Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						21. Keep proper communication between ballasting officer, engine room, bridge (A) 22. Ensure all valves are in the correct position (A) 23. Maintain ballasting equipment as per PMS (A) 24. Engine Room and Bridge manned throughout the operations (A)			
	H: Biological contamination E: Environmental adverse impact	Environment	5	C	C5	25. Use equipment (Ballast Water Treatment units) (En) 26. Tank cleanings as per PMS (En) 27. Maintenance of ballast water treatment unit as per PMS (A) 28. Follow Ballast Water Management Plan and international regulations (A)	3	B	B3

Title/ Description	Ballasting / De-Ballasting Operations					GRA. No	FS-01-IMS03-001-B-012			
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6C Offshore operations - Cargo, bunkering, ballasting and stability OVMSA - Element 10 Environmental and energy management IMO – International Maritime Organisation	IMS Procedure			FS-02-SHP-BWMP-001 – Ballast Water Management Plan	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						29. Regular tank inspections as per PMS (A)				
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
<i>Iris de Vos (Initial 2021)</i>		<i>Muru Palaney, Tommaso Perelli (Initial 2021)</i>			Location	FS	Rev. No	01		
<i>Marino Buselic, Vijay Mundath (Review 2022)</i>		<i>Tommaso Perelli, Muru Palaney (Review 2022)</i>			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Maintenance - Lifting Equipment and Accessories					GRA. No	FS-01-IMS03-001-B-013		
Reference Source	Code of Safe Working Practices for Merchant Seafarers, IMS Forms, Work Instructions and Checklist	IMS Procedure	FS-01-IMS12C-001 Lifting Equipment Procedure		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Assessment and preparation for lifting equipment and accessories maintenance and inspection	H - Misunderstanding of procedures H - Records and certificates not monitored and maintained H - Uncoordinated task or action execution H - Unfamiliarity with the equipment and accessories to be maintained and inspected H – Poor ergonomics considerations H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Improper task preparation	Crew	2	D	D2	1. Follow Lifting Equipment Procedure (A) 2. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 3. All personnel involved to comply with cultural awareness and no harassment policy (A) 4. Plan work schedule and regular breaks, comply with work and rest hours (A) 5. Comply with speak up policy (A) 6. Inspect equipment at appropriate intervals in line with PMS and manufacturer guidance (A) 7. Use of Up-to Date Forms and Checklists as to the latest	1	B	B1

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	E – Use of expired or poorly maintained lifting equipment or accessories					Company Safety Standard System (A) 8. Proper Documentation, Filing and Record Keeping (A) 9. TBT and TRA for the task (A) 10. LOTO and PTW in place, if required (A) 11. If maintenance to be carried 2m above deck requires the completion of Work at Height Permit with Rescue Plan and Rescue Equipment inspected and available. (A) 12. Verification of current records and certification (A) 13. Qualified and competent crew in line with procedure requirement to do the preparation and plans for the task (A) 14. Establish communication means between parties where required (A)				

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						15. Trainings/Familiarization either on board or ashore to gain and retain full knowledge and skills. (A) 16. Apply proper manual handling techniques where task required to handle loads (A) 17. Use of PPE appropriate for task and in line with PPE matrix (PPE)				
Emergency preparedness for potential emergency situation (Slip, trips & falls, Injury, Equipment failure, etc.)	H – Slips, Trips & falls H – Personnel not familiar with task H – Manufacturer instruction not followed E – Death E – Injury E – Damage to equipment	Crew involved	4	C	C4	18. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 19. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 20. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A)		4	A	A4

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						21. Emergency equipment is available and maintained as per PMS (A)				
Execution of lifting equipment and accessories maintenance and inspection	H - Improper delegation of work H - Dropped Objects. H - Slip, trips and fall. E - Injury E - damage to property and equipment	Crew	4	C	C4	Control measures 1 to 21 as applicable 22. Positioning away from line of fire hazards (I) 23. Any observation found on the crane and other lifting equipment/accessories while completing the inspection must be reported and equipment must be quarantined until is repaired or offloaded (I) 24. Isolate work area around a suspended load and lay down areas during crane lifting test and maintenance (I) 25. In case of maintenance of pressurised or electrically powered lines, ensure LOTO is in		4	A	A4

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						place and stored energy released. (En) 26. Designated banksman must be aware of his surroundings and the safety of personnel involved in the task. (A) 27. The Lifting Equipment, Load and Accessories are inspected in line with procedure and manufacturer instructions (A) 28. Responsible supervisor to be the look-out while monitoring and carrying-out the Lifting Maintenance and Inspections. (A) 29. SLAM (A) 30. Stop the Job (A)			
Restore back to operations	H – Poor housekeeping H – Inadequate measures in place before power is restored H – Dropped object	Crew	4	C	C4	31. All items especially movable and falling objects properly arranged and secured. (I) 32. All safety limits and guards are back in operation mode. (En)	4	A	A4

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	H – Lifting equipment and accessories not ready for operations E – Injury E – Equipment damage E – Operations delays					33. After maintenance and inspection ensure system is ready and power back on in line with LOTO procedure (A) 34. Inspect area making sure all tools and equipment are secured. (A) 35. Good Housekeeping around the area. (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Edgar Cristopher Gapuz (Initial 2021)		Tommaso Perelli, Muru Palaney (Initial 2021)				Location	FS	Rev. No	01
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		

Generic Risk Assessment

Title/ Description	Maintenance - Painting					GRA. No	FS-01-IMS03-001-B-014		
Reference Source	Code of Safe working practices		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Preparation for painting - general	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Failure to identify hazards of work area H - Inadequate PPE / PPE not used H: Equipment H -Noise H: Use of Equipment H: Vibration H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used	Crew	1	C	C1	1. Use of Hand arm vibration calculator or tool specifications to establish safe working period I) 2. Isolate work area to prevent noise or vibration exposure, as required (I) 3. Use guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 4. Select the lowest vibration tool suitable for the job (En) 5. Assess task and complete PTW/TRA, as applicable (A) 6. Use of equipment and materials by competent and/or trained personnel, as required (A) 7. Toolbox talk with all personnel involved. (A)	1	A	A1

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	E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E – Improper measures in place					8. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. Comply with work and rest hours (A) 11. Comply with speak up policy (A) 12. Thoroughly visually inspect / test the equipment before use (A) 13. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 14. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 15. Supervisors to monitor vibration exposure using the calculator belonging to and in line with			

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						Noise and Vibration procedure (A) 16. Noise exposure levels to be monitored by site supervisors. (A) 17. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 18. Planning of tasks including suitable breaks from noise/vibration exposure (A) 19. Monitor possible conflict with SIMOPS (A) 20. Check that weather forecast is suitable for painting operations (A) 21. All PPE must be in good condition. (PPE)			
Emergency preparedness for potential emergency situation	H – Instruction manual not followed H – SDS not followed E - Injury E – Poisoning	Crew on board	4	C	C4	22. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	4	A	A4

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(Poisoning, Injury, Pollution, Fire, Damage to equipment, etc.)	E – Damage to equipment E - Pollution E - Fire					23. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 24. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 25. Emergency equipment is available and maintained as per PMS (A)			
Preparation of painting area	H – Inadequate lighting in place H - Potential source of ignition (especially when painting in enclosed space or indoors) H - Inadequate ventilation (Painting in enclosed space or indoors) H – Falling from height (when painting at height) H – Spill of polluting substances to the environment H – Slips trips and falls E – Injury	Crew	4	C	C4	26. When painting on deck ensure scuppers are closed (I) 27. Work area to be swabbed and tested for Cr(VI) prior to starting. If positive, refer to Hexavalent Chromium-6 Cr(VI) GRA (En) 28. Existing lights to be maintained in good working condition. (A) 29. Additional lights used if required. (A) 30. Confined space PTW to be used and Confined space procedure to be complied with, if painting in confined spaces. (A)	4	A	A4

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	E - Pollution					31. Work at height PTW to be used and work at height procedure to be complied with, if painting at height. (A) 32. Adequate ventilation of the space, where necessary additional forced ventilation to be used (A) 33. Continuous monitoring of the atmosphere within the confined space (A) 34. No smoking or hot work in the vicinity of the area. (A) 35. When painting on deck ensure SOPEP equipment is at hand (A) 36. Clear work area from obstacles before commencing, good housekeeping (A) 37. Check adjacent areas are suitable to allow for painting (A) 38. SLAM (A) 39. Stop the job (A)				

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Preparation of paint	H – Wrong chemicals mixed H - Splashes and spills E – Injury E – Pollution E – Fire	Crew	4	C	C4	40. Mixing carried out in controlled / contained area to limit possible spill and splash effects (I) 41. Mixing chemicals to be done by trained / experienced person (A) 42. Follow strictly manufacturer instructions (A) 43. Check availability of SDS and appropriate response equipment is at hand (A) 44. Appropriate PPE for the task are used (PPE)	4	A	A4
Painting operation	H - Contact with skin / eye H – Breathing of fumes/poor ventilation H - Vessel's motion (Rolling, pitching etc due to weather) H - Splashes and spills H - Fatigue E – Injury E – Pollution	Crew	4	C	C4	Control measures 1 to 44, as applicable 45. Monitor weather condition for the planned task, stop task if condition becomes unsuitable. (E) 46. Keep paint in spill containment area if possible (I) 47. Adequate supervision maintained. (A) 48. Plan work and take regular breaks for resting (A)	3	A	A3

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						49. When painting on open deck, ensure adequate protection from environment (A)			
Securing area after painting operations	H - Improper disposal of remaining paint drums / remaining paint H – Poor housekeeping H – spills, splashes H – slips trips and falls P - Pollution E – Injury	Environment	3	C	C3	50. Avoid mixing different types of cleaning materials. (I) 51. Clean up of tools and materials to be done on spill containment area, to prevent damage from accidental spill (I) 52. Use appropriate cleaning materials in line with the safety data sheet. (A) 53. Garbage management plan to be followed. (A) 54. Inspect work area after completion and remove any tools and materials used (A) 55. Adequate training provided to crew to raise awareness for compliance and reduction of waste generation. (A) 56. Proper PPE to be worn (PPE)	2	A	A2

Title/ Description	Maintenance - Painting					GRA. No	FS-01-IMS03-001-B-014			
Reference Source	Code of Safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Task planning and preparation	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Inadequate ergonomics considerations H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Improper measures in place	Crew	1	C	C1	1. TBT with all involved (A) 2. Assess task and complete PTW/TRA, as required (A) 3. Use of equipment by competent and/or trained personnel (A) 4. Monitor possible conflict with SIMOPS (A) 5. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 6. All personnel involved to comply with cultural awareness and no harassment policy (A) 7. Plan work schedule and regular breaks, comply with work and rest hours (A) 8. Comply with speak up policy (A)	1	A	A1

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						9. Verify weather forecast is suitable for the planned task (A) 10. Follow PPE matrix, verify all PPE are in good condition. (PPE)				
Emergency preparedness for potential emergency situation (Equipment failure, Fire, Electrical shock, Injury, etc.)	H – Equipment failure H – Damaged tools H – Crew incompetent for task H – Inadequate PPE E - Injury E – Death E – Damage to vessel E – Fire	Crew involved	4	C	C4	11. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 12. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 13. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 14. Emergency equipment is available and maintained as per PMS (A)		4	A	A4
Tools selection	H - Inadequately maintained tools H – Improper tools used for the job H: Use of Equipment H: Vibration	Crew	2	C	C2	15. If no guards present, then tools not to be used (E) 16. Isolate work area to prevent noise or vibration exposure, as required (I)		2	A	A2

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E - Injury					17. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 18. Check all safety guards / trips in place and operational prior use. (En) 19. Select the lowest vibration tool suitable for the job (En) 20. Selection of tools suitable for the task and area of operation (A) 21. Thorough check of tools and accessories prior use. (A) 22. Tools used and maintained as per makers instructions in an ergonomic way. (A) 23. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 24. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A)				

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						25. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 26. Noise exposure levels to be monitored by site supervisors. (A) 27. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 28. Planning of tasks including suitable breaks from noise/vibration exposure (A) 29. If pressurised tools are used, be aware and ensure appropriate measures are in place to control hazards associated with stored energy (A)			
Area preparation	H – Improper lighting in place H – Inflammable or hazardous atmosphere	Crew	3	C	C3	30. Place barriers and containment to prevent debris spreading (I) 31. Work area to be swabbed and tested for Cr(VI) prior to starting.	3	A	A3

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H – Failure to identify hazards of work area H – Slips trips and falls H – Debris from chipping contaminating surrounding areas E – Injury E – Equipment, vessel damage E – Environmental impact					If positive, refer to Hexavalent Chromium-6 Cr(VI) GRA (En) 32. Additional lights used if required. (En) 33. Atmosphere in the space checked before commencing work. (En) 34. Additional forced ventilation if required, to maintain atmosphere (En) 35. Existing lights to be maintained in good working condition. (A) 36. Relevant permit to work and TRA obtained prior commencing work in the confined space. (A) 37. SLAM (A) 38. Clear work area of possible obstacles or inflammable substances, as required (A)			
Chipping including use of wire brush operation	H - Vessel's motion (Rolling, pitching etc due to weather) H – Communication failure	Crew	3	C	C3	Control measures 1 to 38, as applicable 39. Monitor weather condition throughout the task, if unfavourable stop task. (E)	2	B	B2

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush					GRA. No	FS-01-IMS03-001-B-015			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
	Separate the job into individual tasks and record in sequence. Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H – Flying particles and debris H - Fatigue E - Injury E – Equipment damage					40. Equipment used in environment as per manufacturer's instructions (Ex: Rain, Heat, Humidity etc). (En) 41. Monitor possible conflict with SIMOPS (A) 42. Adequate supervision maintained. (A) 43. Plan work and take regular breaks for resting (A)				
Secure area after chipping including use of wire brush	H – Debris not properly disposed of H – Poor housekeeping H – Slips trips and falls E - Environmental impact E – Injury	Crew	1	C	C1	44. Secure area, clear of debris (I) 45. Inspect work area after completion and remove any tools and materials used (A) 46. Inspect tools after work and segregate if damaged (A) 47. If area needs to be painted afterwards, refer to painting TRA (A)		1	A	A1
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Miguel Ganza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		

Title/ Description	Maintenance -Deck – Chipping Including Use of Wire Brush						GRA. No	FS-01-IMS03-001-B-015		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Task general preparation	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Failure to identify hazards of work area H – Unfavourable ergonomics / Repetitive Stress Injury H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) H: Use of Equipment H: Vibration E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used	Crew	1	C	C1	<ol style="list-style-type: none"> 1. Isolate work area to prevent noise or vibration exposure, as required (I) 2. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 3. Select the lowest vibration tool suitable for the job (En) 4. Equipment used as per makers instructions in an ergonomic way. (En) 5. TBT with all involved (A) 6. Assess task and complete PTW/TRA, if necessary (A) 7. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 	1	A	A1

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E – Improper measures in place					8. All personnel involved to comply with cultural awareness and no harassment policy (A) 9. Plan work schedule and regular breaks, comply with work and rest hours (A) 10. Comply with speak up policy (A) 11. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 12. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 13. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 14. Noise exposure levels to be monitored by site supervisors. (A) 15. Work share/rotation of task is recommended to reduce			

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						individual exposure to noise (and vibration). (A) 16. Planning of tasks including suitable breaks from noise/vibration exposure (A) 17. Use of equipment and material by competent and/or trained personnel (A) 18. Job rotated to avoid repetitive stress injury. (A) 19. Monitor possible conflict with SIMOPS (A) 20. Verify weather forecast is favourable for the task (A) 21. Follow PPE matrix (PPE). 22. All PPE must be in good condition. (PPE)			
Emergency preparedness for potential emergency situation (Contaminations,	H – Health Emergencies H – Environmental Emergencies H- Incorrect use of substance H – Untrained personnel	Crew	4	C	C4	23. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	4	A	A4

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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burns, poisoning, skin irritations, eye irritations, electrical shock, etc.)	E – Death E - Injury/illness of personnel E – Damage to vessel E – Damage to 3rd party property					24. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 25. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 26. Emergency equipment is available and maintained as per PMS (A)			
Area preparation	H – Improper lighting in place H - Inadequate ventilation H – Slips trips and falls H - Harmful chemical reaction E – Injury E – Equipment damage	Crew	2	C	C2	27. Area to be cleared of as much debris as possible prior to commencing work. (E) 28. Secure loose equipment in the area to prevent damage or loss (I) 29. Isolate work area as appropriate to prevent accidental access (I) 30. Adequate ventilation in the space where chemicals are used. (En) 31. Existing lights to be maintained in good working condition. (A) 32. Additional lights used if required. (A)	2	A	A2

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						33. Monitor weather condition for the planned task. (A) 34. Verify compatibility of chemicals as per SDS with area of application (A)			
Selection of equipment and materials	H - Inadequately maintained equipment H - Use of material inadequate for task H - Safety trips / Guards missing on equipment H - Safety data sheet not consulted H - Improper handling of chemicals E – Injury E – Equipment damage	Crew	3	C	C3	35. Mixing (if any) of chemicals are done in open or well ventilated area. (I) 36. Maintenance of equipment as per manufacturer's instructions. (En) 37. Check all safety guards / trips in place and operational prior use. (En) 38. Select equipment suitable for task and for area of operation (A) 39. Checks as per manufacturer's instructions prior use. (A) 40. Safety data sheets for the product to be consulted prior to use. (A) 41. COSHH assessment in place and reviewed before task has been commenced. (A)	2	B	B2

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						42. Check availability of SDS and appropriate response equipment is at hand (A) 43. Personnel to be trained in safe use of chemicals. (A) 44. Adequate supervision provided. (A)			
Cleaning including use of chemicals and high-pressure washer operation execution	H - Incorrect operation of high pressure washer H - Vessel's motion (Rolling, pitching etc due to weather) H - Skin / eye contact with flying debris H – Slips trips and falls E – Injury E – Equipment damage	Crew	3	C	C3	Control measures 1 to 44, as applicable 45. Monitor weather, stop operations if weather deteriorates (E) 46. Use of equipment according manufacturer instructions (A). 47. Adequate supervision maintained. (A) 48. Maintain good housekeeping during operations to prevent creating obstacles in work area (A) 49. Be aware of hazards of stored energy (A) 50. SLAM (A) 51. Stop the Job (A)	3	B	B3

Title/ Description	Maintenance -Deck – Cleaning Including Use of Chemicals and High-Pressure Washer					GRA. No	FS-01-IMS03-001-B-016			
Reference Source	Code of Safe Working Practices		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E = Elimination S = Substitution I = Isolation En = Engineering Controls A = Administration PPE = Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Securing area after cleaning operations	H – Debris not properly disposed of H – Chemical products nor properly disposed of H – Poor housekeeping H – Slips trips and falls E - Environmental impact E – Injury	Crew	1	C	C1	52. Secure area, clear of debris (I) 53. Inspect work area after completion and remove any equipment and materials used (A) 54. Inspect equipment after work and segregate if damaged (A) 55. Dispose of chemical products or residues in line with SDS and COSHH (A)		1	A	A1
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017		
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Pilot boarding preparation	H – Communication misunderstanding H – Instructions misunderstanding H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Incorrect ladder rigging	Crew	1	C	C1	1. Radio communication with pilot station and pilot boat established and pilot boarding requirements agreed (A) 2. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 3. All personnel involved to comply with cultural awareness and no harassment policy (A) 4. Plan work schedule and regular breaks, comply with work and rest hours (A) 5. Comply with speak up policy (A) 6. Toolbox talk between all personnel involved in the	1	A	A1

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017			
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>
						operation, including review of TRA (A) 7. Check and monitor weather conditions (A) 8. Follow MOPO (A)				
Emergency preparedness for potential emergency situation (Equipment failure, weather condition, MOB, Capsize of Pilot boat, damage to equipment, etc.)	H – Equipment failure H – Unfamiliar crew H – Lack of Pilot experience H – Weather condition E – MOB E – Injury E – Damage to equipment E – Damage to 3 rd party property	Crew involved	4	C	C4	9. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 10. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 11. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 12. Emergency equipment is available and maintained as per PMS (A)		4	A	A4
Pilot ladder rigging	H – Slips and trips H – Communication misunderstanding H – Instructions misunderstanding	Crew	4	C	C4	13. Maintain good housekeeping and remove any obstruction around pilot boarding area (E)		4	A	A4

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017			
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H – Incorrect ladder rigging H – use of damaged equipment H – Weather, sea state E – Fall overboard E – Injury E – Fatality E – equipment damage					14. Only personnel involved in operation to be present in the area (I) 15. Manual handling technique to place ladder (En) 16. Rig the ladder using the correct and approved rigging anchor points (En) 17. Rigging to the agreed height above water line (En) 18. Lifebuoy with line & light in place / MOB Boat ready. (En) 19. Sufficient lighting (En) 20. Personnel at pilot boarding station to have communication means and backup with bridge and test on arrival after TBT (A) 21. Check pilot ladder for damages and defects before rigging (A) 22. Pilot ladder rigging supervised and arrangement confirmed to bridge (A)				

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017		
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						23. Check and monitor weather conditions (A) 24. Follow MOPO (A) 25. SLAM (A) 26. Stop the Job (A) 27. Personnel involved to wear inflatable and SOLAS approved work vests/PFD's, safety lines. (PPE) 28. Correct PPEs to be used (PPE)			
Pilot transfer operations	H – Slips and trips H – Weather, sea state H – Pilot boat approach in unsafe manner E – Fall overboard E – Injury E – Fatality E – equipment damage, collision	Crew, pilot, pilot boat crew	4	D	D4	29. Monitor weather conditions, abort operations if conditions require it (E) 30. Pilot to climb with hands free (I) 31. Luggage to be picked up separately (I) 32. Set agreed speed and heading (En) 33. Create lee way as required in agreement with pilot boat (En) 34. Internal communication about pilot boat approach (A)	4	A	A4

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017		
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						35. Bridge communication with pilot boat, about speed and lee way (A) 36. Personnel involved to wear inflatable and SOLAS approved work vests/PFD's, safety lines (PPE)			
Pilot ladder recovery	H – Slips and trips H – incorrect ladder recovery H – Weather, sea state E – Fall overboard E – Injury E – Fatality E – equipment damage	Crew	4	C	C4	37. Maintain good housekeeping (E) 38. Lifebuoy line & light in place and MOB boat on standby (En) 39. Correct manual handling techniques (En) 40. Proper supervision (A) 41. Inform bridge when pilot boarding area is secured (A) 42. Correct PPE (PPE) 43. All personnel to wear inflatable SOLAS approved work vests / PFD's (PPE)	4	A	A4
Assessor's Name(s)	Reviewers Name(s)		Date		1 September 2022	Time	08:00		
Tommaso Perelli (Initial 2021)	Muru Palaney (Initial 2021)		Location		FS	Rev. No	01		

Title/ Description	Pilot Transfer Operations by Pilot Boat and Pilot Ladder Rigging					GRA. No	FS-01-IMS03-001-B-017			
Reference Source	COSWP		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval		Julia Korpak	Date	1 September 2022	
					Next Review date		31 August 2023			

Generic Risk Assessment

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Work over the side preparation	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Failure to identify hazards of work area H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – improper measures in place	Crew	1	C	C1	1. Consider if task can be executed without work over side (E) 2. Use engineering controls such as fixed platforms with guards, scissor lifts, etc. if applicable (En) 3. Lifebuoy with line & light available for immediate use (En) 4. Use permanent fall arrests and equipment limiting the movement, if applicable (En) 5. Follow working at height and over the side procedure (A) 6. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A)	1	A	A1

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						7. All personnel involved to comply with cultural awareness and no harassment policy (A) 8. Plan work schedule and regular breaks, comply with work and rest hours (A) 9. Comply with speak up policy (A) 10. Provide proper supervision of the task in line with PTW (A) 11. Allow only trained personnel to work. (A) 12. Use only approved, certified and properly maintained equipment. (A) 13. Inspection of all fall protection staging, platforms, ladders, PPE by competent person prior to job (A) 14. Use of equipment by competent and/or trained personnel (A) 15. Assess task and complete PTW/TRA (A) 16. Create rescue plan, including rescue from height and recovery				

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						of mano overboard, as applicable (A) 17. Always provide watchman with reliable communication line(s) (VHF/UHF radios). (A) 18. Communication means and channels agreed and established (A) 19. Assess weather for duration of task (A) 20. Follow MOPO guidelines (A) 21. Monitor possible conflict with SIMOPS (A) 22. TBT with all involved (A) 23. When work systems are involved, consider Lock out Tag out and additional control measures and PTW as applicable (A) 24. Consider environmental risks and measures as result of the work activity (A) 25. Establish correct length of fall arrest systems (such as lanyard			

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						etc) for the height of the work platform (PPE) 26. Personnel involved to wear inflatable and SOLAS approved work vests/PFD’s (PPE)				
Emergency preparedness for potential emergency situation (Slip, trips & falls, Injury, MOB, Equipment failure, etc.)	H – Slips, Trips & falls H – Personnel not familiar with task H – Instruction not followed E - MOB E – Death E – Injury E – Damage to equipment	Crew	5	C	C5	27. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 28. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 29. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 30. Emergency equipment is available and maintained as per PMS (A)		5	A	A5
Access to work area	H – Unsafe access and egress H – Slips and trips H – Poor housekeeping	Crew	5	C	C5	31. Cordoned off work site, if required (I)		4	B	B4

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H – Weather conditions and ship's movement H – Dropped objects H – Use of defective work platforms, scaffolding, ladder etc. E – Injury E – Fatality E – equipment damage					32. Secure the equipment at height. Remove any objects that may fall. (I) 33. Use appropriate anchor points (En) 34. Proper climbing techniques to be used (En) 35. Climb with hands free, equipment and tools to be carried with other means or attached to body (En) 36. Rescue at height equipment prepared as applicable (En) 37. MOB boat ready and on standby (En) 38. Work preparation to be completed as discussed (A) 39. PTW available and approved (A) 40. Competent person to inspect the working area prior beginning of task (A) 41. Inspect all equipment, PPE and accessories prior beginning of task (A)			

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						42. Monitor weather conditions, lighting, and movement of the vessel (A) 43. Use SLAM technique (A) 44. Stop work authority in case of deviation (A)			
Execution of work over the side	H – Slips and trips H – Poor housekeeping H – weather conditions and ship’s movement H – Dropped objects H – Overreaching / misaligned work area H - Fatigue E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	Control measures 1 to 44, as applicable 45. If work area is not safely accessible, stop the job (E) 46. Secure the equipment at height. Remove any objects that may fall. (I) 47. Use appropriate anchor points (En) 48. Monitor fatigue and take regular breaks as required (A) 49. Monitor weather conditions, lighting, and movement of the vessel (A) 50. Continuous monitor possible conflict with SIMOPS (A) 51. Use SLAM technique (A)	4	B	B4

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						52. Stop work authority in case of deviation (A)			
Safe securing after completion of work	H – Slips and trips H – Poor housekeeping H – Weather conditions and ship’s movement H – Dropped objects H - Fatigue E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	53. Account for all tools and equipment (E) 54. Restore all equipment and systems to safe working use (En) 55. Monitor fatigue and take regular breaks as required (A) 56. Securing work area to be done as discussed during work preparation (A) 57. Close of PTW (A)	4	B	B4
Emergency work over the side rescue	H – Slips and trips H - Overhanging person H – person in water H – Weather conditions and ship’s movement H – Dropped objects H – Crew unfamiliar with rescue operations H - Fatigue E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	58. Stop conflicting operations in rescue area (I) 59. Correct use of rescue equipment based on the situation (En) a. Execute rescue at height as planned (A) b. If person is in the water, rescue as per MOB procedure (A) 60. Rescue team to be trained (A) 61. Rescue at height/MOB drills executed as applicable (A)	5	A	A5

Title/ description	Working Over the Side - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-018		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule	Working at Height			
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						62. Medical team on standby (A)			
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. high, medium or low			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. high, medium or low
Work at height preparation	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Failure to identify hazards of work area H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – improper measures in place	Crew	1	C	C1	1. Consider if task can be executed without work at height (E) 2. Use engineering controls such as fixed platforms with guards, scissor lifts, etc. if applicable (En) 3. Use permanent fall arrests and equipment limiting the movement, if applicable (En) 4. Provide proper supervision of the task in line with PTW (A) 5. Allow only trained personnel to work. (A) 6. Follow working at height procedure (A) 7. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A)		1	A	A1

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>
						8. All personnel involved to comply with cultural awareness and no harassment policy (A) 9. Plan work schedule and regular breaks, comply with work and rest hours (A) 10. Comply with speak up policy (A) 11. Use only approved, certified and properly maintained equipment. (A) 12. When work systems are involved, consider Lock out Tag out and additional control measures and PTW as applicable (A) 13. Inspection of all fall protection staging, platforms, ladders, PPE by competent person prior to job (A) 14. Use of equipment by competent and/or trained personnel (A) 15. Assess task and complete PTW/TRA (A) 16. Create rescue plan (A)				

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating	
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>	
						17. Always provide watchman with reliable communication line(s) (VHF/UHF radios). (A) 18. Communication means and channels agreed and established (A) 19. Assess weather for duration of task (A) 20. Follow MOPO guidelines (A) 21. Monitor possible conflict with SIMOPS (A) 22. TBT with all involved (A) 23. Establish correct length of fall arrest systems (such as lanyard etc) for the height of the work platform (PPE)				
Emergency preparedness for potential emergency situation (Slip, trips & falls, Injury, Equipment failure, etc.)	H – Slips, Trips & falls H – Personnel not familiar with task H – Instruction not followed E – Death E – Injury E – Damage to equipment	Crew involved	5	C	C5	24. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 25. Adhere to FS-01-IMS17-001 Emergency Response Manual (A)	5	A	A5	

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						26. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 27. Emergency equipment is available and maintained as per PMS (A)				
Access to work area	H – Unsafe access and egress H – Slips and trips H – Poor housekeeping H – weather conditions and ship’s movement H – Dropped objects H – use of defective work platforms, scaffolding, ladder etc. E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	28. Cordoned off work site (I) 29. Secure the equipment at height. Remove any objects that may fall. (I) 30. Proper climbing techniques to be used (En) 31. Use appropriate anchor points (En) 32. Climb with hands free, equipment and tools to be carried with other means or attached to body (En) 33. Rescue at height equipment prepared as applicable (En) 34. Work preparation to be completed as discussed (A) 35. PTW available and approved (A)		4	B	B4

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						36. Competent person to inspect the working area prior beginning of task (A) 37. Inspect all equipment, PPE and accessories prior beginning of task (A) 38. Monitor weather conditions, lighting and movement of the vessel (A) 39. Use SLAM technique (A) 40. Stop work authority in case of deviation (A)				
Execution of work at height	H – Slips and trips H – Poor housekeeping H – weather conditions and ship’s movement H – Dropped objects H – Overreaching / misaligned work area H - Fatigue E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	Control measures 1 to 40, as applicable 41. If work area is not safely accessible, stop the job (E) 42. Secure the equipment at height. Remove any objects that may fall. (I) 43. Use appropriate anchor points (En) 44. Monitor fatigue and take regular breaks as required (A)		4	B	B4

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17	IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						45. Monitor weather conditions, lighting and movement of the vessel (A) 46. Continuous monitor possible conflict with SIMOPS (A) 47. Use SLAM technique (A) 48. Stop work authority in case of deviation (A)			
Safe securing after completion of work	H – Slips and trips H – Poor housekeeping H – Weather conditions and ship’s movement H – Dropped objects H - Fatigue E – Injury E – Fatality E – equipment damage	Crew	5	C	C5	49. Account for all tools and equipment (E) 50. Restore all equipment and systems to safe working use (En) 51. Securing work area to be done as discussed during work preparation (A) 52. Monitor fatigue and take regular breaks as required (A) 53. Close of PTW (A)	4	B	B4
Emergency work at height rescue	H – Slips and trips H - Overhanging person H – Weather conditions and ship’s movement H – Dropped objects	Crew	5	C	C5	54. Stop conflicting operations in rescue area (I) 55. Correct use of rescue equipment based on the situation (En)	5	A	A5

Title/ Description	Working at Height - Operations and Rescue					GRA. No	FS-01-IMS03-001-B-019			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 17	IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Working at Height		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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	H – Crew unfamiliar with rescue operations H - Fatigue E – Injury E – Fatality E – equipment damage					56. Execute Rescue at height as planned (A) 57. Rescue team to be trained (A) 58. Rescue at height drills executed as applicable (A) 59. Medical team on standby (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Workplace Risk Assessment - Workshop Machinery					GRA. No	FS-01-IMS03-001-B-020			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 18, CH 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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Working in workshop general	H – Inappropriate working clothes or inappropriate use of PPE H – Inadequate behaviour H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Injury E – Equipment Damage	Personnel working in the workshop Vessel	3	C	C3	1. All stores and tools to be properly stowed. (S) 2. All personnel to be trained in the correct type and use of PPE and made aware of its limitations. (A) 3. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 4. All personnel involved to comply with cultural awareness and no harassment policy (A) 5. Plan work schedule and regular breaks, comply with work and rest hours (A) 6. Comply with speak up policy (A) 7. All operations should be performed by a competent		3	B	B3

Title/ Description	Workplace Risk Assessment - Workshop Machinery						GRA. No	FS-01-IMS03-001-B-020	
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 18, CH 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>(high, medium or low)</div>
						person, where necessary under supervision. (A) 8. All personnel working in the workshop need to be familiarised with the safety and emergency procedures (A) 9. Workshop tasks not identified as routine by HoD should be done only after Toolbox talk. (A) 10. Safety posters & instructions should be placed in the workshop for all to see and observe. (A) 11. SLAM (A) 12. Stop the job (A) 13. Working clothes to be close fitting with no loose flaps and appropriate for the work involved in line with PPE matrix (PPE). 14. Special PPE to be provided for persons that may be exposed to particular corrosive or			

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Tasks	A: Hazard		B: Initial Risk		C: Controls		D: Residual Risk		
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						contaminating substances. (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure, Blackout, Fire, electrical shock, Injury, Explosion, etc.)	H – Crew incompetent for task H – Crew unfamiliar with equipment H – Hot work procedures not followed H – Poor communication E - Injury E – Death E – Damage to vessel E – Damage to 3rd party property E – Fire E - Explosion	Crew on board	4	C	C4	15. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 16. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 17. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 18. Emergency equipment is available and maintained as per PMS (A)	4	A	A4
Workshop and bench machines (fixed installations)	H – Not affixed properly H – Not maintained properly H – Not operated properly H -Noise H: Use of Equipment	Personnel in the workshop	4	D	D4	Control measures 1 to 18, as applicable 19. A machine in use or powered up must never be left unattended. (E) 20. If a machine is found to be defective it should be tagged	4	A	A4

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	H: Vibration E: Explosion, fire, E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E – Equipment damage E – Injuries, fatality					out and isolated from its source until repaired by a competent person. (I) 21. Before a drill or lathe is started, the chuck key is to be removed and the operator should ensure that other people are well clear of the machine. (I) 22. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 23. Isolate work area to prevent noise or vibration exposure, as required (I) 24. No control or light switch to be in such a position that an operator is required to lean over a machine in order to reach the switch (En) 25. Grinding wheel suitable for equipment and within expiry date (En)			

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						26. All dangerous parts of machines must be securely guarded. (En) 27. Select the lowest vibration tool suitable for the job (En) 28. Workpieces (such as for drilling and milling) are to be securely held at all times by a machine clamp or vice (En) 29. Machine operators should be competent in the use of the machine, familiar with its controls, and authorised to operate it. (A) 30. The machine is to be checked each time before use, and the guards and safety devices to be inspected before starting the machine. (A) 31. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A)				

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						32. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 33. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 34. Noise exposure levels to be monitored by site supervisors. (A) 35. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 36. Planning of tasks including suitable breaks from noise/vibration exposure (A) 37. Use only properly certified and maintained equipment as per manufacturer’s instructions, PMS and suitable for marine environment and for the task (A)			

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Hot work activity in workshop	H – Fire, explosion E – Injury, fatality	Personnel on board Vessel	5	C	C5	Control measures 1 to 18, as applicable 38. Surrounding area to be checked to ensure no flammable substance is present and fixed/portable FiFi equipment is readily available (I) 39. Verify that oxygen and acetylene bottles are appropriately maintained and stored (I) 40. Use of appropriate ventilation and extraction, to minimise possible harmful fumes and oxygen depletion. (En) 41. Operators should be competent and familiar with the equipment (A) 42. Equipment to be inspected and checked by a responsible and competent person before use (A) 43. Personnel to be given instructions if special	4	A	A4

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						precautions need to be taken. (A) 44. Adequate fire watch to be maintained as required (A)			
Hot work involving use of electric welding equipment	H – Electric shock, fire E – Injury, fatality, Damaged equipment	Workshop personnel	4	C	C4	Control measures 1 to 18, 38 to 44,as applicable 45. No repairs to cables permitted, connectors to be fully insulated. (E) 46. Suitable means to be provided for immediate cut-off of current from the electrode. (En) 47. Power sources to have DC current to minimise risk of electric shock. (En) 48. The "lead & return" system where the welding unit has tow cables should be used, with the "return" cable being earthed separately to the ships structure. (En) 49. The lead and return cables should be of the shortest length possible & of	4	A	A4

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						appropriate cross-section to avoid a voltage drop. (En) 50. All welding cables to be inspected and checked before use. (A)			
Workshop cleanliness	H – Inadequate housekeeping H – Slips and trips E – Injuries E – Equipment Damage	Personnel on board	3	C	C3	51. Working area to be kept organized, clean & uncluttered. (I) 52. Oily rags & paper/wood products to be placed in a steel container with a lid and disposed through the incinerator or landed ashore with garbage. (I) 53. Do not allow swarf and metal turnings to build up around machinery. Put in a separate container for correct disposal. (I) 54. Place workshop posters and danger signs as appropriate (A)	2	B	B2
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	

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Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Workplace Risk Assessment – Mental and Physical Health					GRA. No	FS-01-IMS03-001-B-021			
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		N/A	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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Working with chemicals (painting, cleaning oily parts, taking bunkers, work with hydraulic or lube oil, cleaners, rig wash, degreaser, housekeeping cleaning with chemicals, etc)	H- Absorption by skin, eyes, mouth, breathing vapours, exceeding threshold limit value (TLV); E- Injuries or death	Employees performing the job	4	C	C4	1. Exchange chemical substance by non-toxic (E) 2. Substitute chemical substance by less harmful (S) 3. COSHH Procedure (A) 4. PTW procedure, as required (A) 5. Adhere to the SDS instructions for handling and working with the hazardous substance(s) (A) 6. Be aware of TLVs, and 7. Wear PPE as per COSHH assessment and SDS and PPE matrix (PPE)		3	B	B3
Charging refrigeration / Air conditioning systems	H- Contact with refrigerant liquids E- Severe irritation	Employees performing the job	3	B	B3	8. Ensure compressed air system is depressurized at the work area. (En) 9. Lock out tag out procedure (A) 10. PTW procedure (A) 11. All involved to use appropriate PPE. (PPE)		2	B	B2

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Battery handling	H- Corrosive, highly flammable, stored energy, manual handling. E- Injuries, burns, fire	Employees performing the job	3	C	C3	12. Appropriate firefighting agent located in vicinity (En) 13. Follow manual handling procedure when transporting batteries (A) 14. Follow LOTO when operating the batteries system (A) 15. Follow Lithium batteries procedure in case of lithium batteries installed (A) 16. Handling, maintenance and operation instructions to be available (A) 17. Use batteries within their lifecycle period (A) 18. Appropriate PPE for isolation against electric shock and eye protection on top of normal PPE (PPE)	3	A	A3
Working with electricity	H – Electrical shock E – Burns, death	Employees performing the job	4	C	C4	19. No stored energy present after LOTO (E) 20. Lock out tag out procedure (A) 21. PTW procedure (A)	3	A	A3

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						22. PPE against electric shock (PPE)				
Welding	H – Welding fumes, sparks, heat, corrosive liquid, Non-ionizing radiation. E – Respiratory irritation, edema of lungs, electric shock, burns, long term respiratory issues	Employees performing the job	4	C	C4	23. Hot Work procedure (A) 24. PTW procedure (A) 25. Respiratory protection, welding mask and gloves on top of normal PPE, sunscreen (PPE)		4	A	A4
Handling bulk bunkering hoses	H – Ingesting bulk, contact with eyes, skin, manual handling. E – Irritation, nausea, vomiting, injury	Employees performing the job	2	C	C2	26. Empty hose(s) after bunkering / before disconnection. (En) 27. Manual handling procedure (A) 28. Bunker procedure (A) 29. PTW procedure, as required (A) 30. Obtain permission form the Master and Chief Engineer if the operation involves any hazardous materials in bulk. (A) 31. All involved to use proper PPE. Refer to PPE Manual. (PPE)		2	A	A2
Working in or near funnel ducts. Exhaust leaks.	H-Exhaust fumes E- Irritation to respiratory system / eyes.	Employees performing the job	3	B	B3	32. Inspect the working area and the surrounding areas. To be done by a competent person(s) only. Do gas-free test where necessary. (A)		2	A	A2

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						33. Periodically re-test for vapours during the work in progress. (A) 34. Lock out tag out procedure, as applicable (A) 35. PTW procedure, as applicable (A) 36. PPE shall be in good condition, shall fit and the user shall be familiar with its use. Refer to PPE Manual (PPE)			
Work activities/machinery causing loud or steady noise (Engine room machinery, fans, exhausts, chipping, needle gun, deck machinery)	H- Impact noise / Loud, steady noise E- Ear injury, long term acoustic disability, deteriorating mental and/or physical health conditions	Employees performing the job	4	C	C4	37. Ensure guards and barriers as provided by manufacturer are in place and in good condition (En) 38. Allow only competent and trained personnel to work on the systems. (A) 39. Properly plan and discuss the job. A TBT to be held. Roles and responsibilities to be recorded. (A) 40. Follow Lockout-Tagout procedures when applicable (A) 41. Noise and vibration survey available to determine	4	A	A4

Title/ Description	Workplace Risk Assessment – Mental and Physical Health					GRA. No	FS-01-IMS03-001-B-021		
Reference Source	Code of Safe Working Practices for Merchant Seafarers		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		N/A
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						appropriate TLV and appropriate control measures (A) 42. 'Stop the Job policy' (A) 43. Use SLAM before starting the job (A) 44. All involved to use proper PPE. Refer to PPE Manual. (PPE)			
Vessel vibrations due to propeller & machinery, holding a vibrating tool	H-Vibration (Hand) E- Tingling sensation in the fingers, deteriorating mental and/or physical health conditions	Employees performing the job	3	B	B3	Control measures 37 to 44, as applicable	2	A	A2
Radar, radio transmitter	H – Microwave / radio radiation E – Long term health effects	Employees performing the job	3	B	B3	45. Lock out tag out PTW and toolbox meeting for awareness when working close by transmitters (E) 46. Safe distance (A) 47. All involved to use proper PPE. (PPE)	2	A	A2
Metabolic (body) heat: working in hot climate (Engine room, outside)	H – Excessive heat E – Exhaustion, Heat stroke leading to death, deteriorating mental	Employees performing the job	4	B	B4	48. Toolbox meeting for awareness (A) 49. Be aware of signs of heat exhaustion and heat stroke for self and others (A)	4	A	A4

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Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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	and/or physical health conditions					50. Promote awareness on working in hot climate and its effects (A) 51. Take frequent breaks, stay hydrated. Reduce exposure (A) 52. Appropriate PPE to protect from heat (PPE)			
Vessel rolling due to swell/waves	H – Vessel movement E – Sea Sickness - Motion sickness	Employees performing the job	2	C	C2	53. Consider medical treatment using sea sickness tablets, if required (En) 54. Commercial Forecasting Service (A) 55. Adverse weather Plan in place as per adverse weather procedure (A) 56. Familiarisation training for new crew (A)	1	B	B1
Contact with radioactive material present in cargo for use offshore, non-destructive testing, smoke detectors,	H – Radioactive material E – Skin burns, sickness, loss of hair	Employees performing the job	2	B	B2	Control measures 45 to 47 57. Awareness, Warning signs (A) 58. Handle material/equipment as per manufacturer instructions (A)	2	A	A2

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level / density measurement										
Contaminated food and/or drink	H – Food and drink contaminated with micro-organisms E – Food poisoning; hepatitis A, amoebic dysentery	Employees performing the job	3	C	C3	59. Discard expired, spoiled or decomposed food (E) 60. Bottled/filtered water is provided for drinking/ cooking. (S) 61. Vessel only receives water from municipal sources and with certificate, as applicable (I) 62. Cooks only use potable water for cooking if the water reaches boiling point. (I) 63. Potable water hoses are flushed out prior to being used for re-supply. (A) 64. Inspect provisions before loading (A) 65. Provisions only from credible and Company approved sources (A) 66. Follow hygiene protocols for food storage, preparation and serving (A)		2	B	B2

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Pathogens present in static water systems and emitted as an aerosol (cooling systems; hot water supplies; showers; firefighting systems)	H – Water borne pathogen –, Legionella bacteria E – legionnaires’ disease – pneumonia (severest form of infection may be fatal);	Employees performing the job	3	C	C3	Control measures 59 to 66, as applicable 67. Checks and laboratory analysis of potable water conducted periodically as per PMS (A) 68. Follow proper hygiene, housekeeping and fresh water management procedures (A)		3	B	B3
Contact with infecting agents	H – Infective agents from all other sources E –Infections	Employees performing the job	4	B	B4	69. Isolate infected persons (I) 70. Consult with professional medical practitioner, as required (A) 71. Appointed persons to monitor, provide healthcare (A) 72. Immediate Reporting to prevent spread (A)		4	A	A4
Heavy use of Visual Display Units (VDU)	H – Poor workplace/task design leading to e.g. awkward postures, repetitive movements, excessive stretching, bending, pushing, pulling E - Muscular discomfort; eyestrain	Employees performing the job	2	D	D2	73. Adequate lighting (En) 74. Adequate, ergonomic seats and work place (En) 75. Awareness training (A) 76. Take frequent breaks (A) 77. Follow work and rest hour schedule (A)		2	B	B2

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Insufficient space for the task, improper workplace set up	H –awkward postures, repetitive movements, excessive stretching, bending, pushing, pulling E- Impaired performance; musculoskeletal illness, deteriorating mental and/or physical health conditions	Employees performing the job	3	C	C3	Control measures 73 to 77	2	B	B2
Manual handling.	H – Repetitive movements, excessive stretching, bending, pushing, pulling E - Impaired performance; musculoskeletal illness	Employees performing the job	3	D	D3	78. Reduce load weight, if possible (S) 79. Use tools or equipment to minimise manual handling (En) 80. Adequate training in stepping, handling & lifting techniques (A) 81. Toolbox meeting on proper manual handling (A) 82. Availability and correct use of PPE (PPE)	2	B	B2
Prolonged sitting during travel	H – Prolonged immobility in cramped conditions E – Stiff, painful muscles, deep vein thrombosis, pulmonary embolism	Employees performing the job	4	B	B4	83. Consult medical advice prior travelling, in case the traveller has high risk medical history (A) 84. Massage area of stiffness (A)	4	A	A4

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						85. Frequent breaks, movement and change of position (A) 86. Take adequate rest before commencing duties (A)				
Repetitive tasks – Chipping, painting, office work.	H – Repetitive task, noise and vibration E – Repetitive Strain Injury, Muscular discomfort, eyestrain, deteriorating mental and/or physical health conditions	Employees performing the job	3	C	C3	Control measures 37 to 44 87. Take frequent breaks. (A) 88. Place yourself in appropriate posture and body position for the task to avoid injury (A)		3	A	A3
Work overload or under load	H – Work overload or under load, poor communication. E – Anxiety, stress, loss of attention and focus on the job, safety incident or production loss, deteriorating mental and/or physical health conditions.	Employees performing the job	3	C	C3	89. Open communication between supervisors and teams (A) 90. Monitoring of workload and reschedule/re-assign workload if possible (A) 91. Awareness of team/co-worker’s behaviour and raise concerns (A) 92. Employee Assistance Program (EAP) available and promoted to all (A)		3	B	B3

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Smoking	H – Active and Passive Smoking E – Irritation of airways and eyes, long term respiratory issues, deteriorating mental and/or physical health conditions	Employees performing the job	4	B	B4	93. Designate Smoking area to segregate non-smokers form smokers. (S) 94. Designated smoking area to be well ventilated (En) 95. Enforce Smoking policies. (A) 96. Promote healthy lifestyle and benefits of smoking reduction or elimination (A)	4	A	A4	
Lack of Healthy Lifestyle	H – Unbalanced diet, overwork, lack of work-life balance, lack of physical exercise, lack of social activities, Lack of facilities E – Reduced fitness; impaired performance, deteriorating mental and/or physical health conditions	Employees performing the job	3	D	D3	97. Gym and recreation facilities provided and well maintained, and accessible for all personnel (En) 98. Health and wellness as part of safety meeting agenda (A) 99. Well balanced meals cooked. (A) 100. Wellbeing campaign (A) 101. Employee Assistance Program (EAP) available and promoted to all (A)	2	B	B2	
Incorrect or delayed treatment of illness or injury	H – Delayed reporting or treatment of illness/injury, Inappropriate treatment for the injury/illness	Employees performing the job	4	B	B4	102.Promote all crew to report all injury/illnesses immediately to supervisors (A)	3	A	A3	

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	E – Worsening of Illness / Injury					103.Appropriate training to designated medical officer (A) 104.Available onshore medical assistance (A) 105.Medical equipment stock in line with requirements (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		

Generic Risk Assessment

Title/ Description	Workplace Risk Assessment - Galley Operations					GRA. No	FS-01-IMS03-001-B-022		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 23		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
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General hazards	H – Hot liquids, bacteria contamination, sharp tools, contact with cleaning products E – Injuries / illness, food poisoning	Personnel involved in the work + all crew	3	D	D3	<ol style="list-style-type: none"> 1. Dispose food appropriately after meal time (E) 2. Use different cutting boards for meat, vegetables and fish. (I) 3. Ensure foods are properly segregated and covered with preparation dates attached (I) 4. Ensure that the freezer, fridge, cold rooms, bain marie rooms have the correct temperature (En) 5. Clean the galley floor as per schedule (A) 6. Proper familiarisation and knowledge of hygiene code requirements (A) 7. Monitor temperature of prepared food (A) 8. Monitor expiration date of food (A) 	2	B	B2

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						9. Wear suitable PPE as required for the task. (PPE) 10. Handle knives with care and wear steel glove to avoid cuts (PPE)				
	H – Weather conditions, rolling ship, rolling equipment E – Injuries	Personnel involved in the work	3	C	C3	11. Ensure all movable equipment is secured and galley is maintained in seaworthy condition (En) 12. When the ship is rolling ensure pots and pans are secured on the plates. (A) 13. Take small steps and keep one hand on the ship at all times. (A) 14. Galley crew to monitor advice from bridge crew regarding weather forecast (A)		2	B	B2
	H – Working area, slippery floors, hot/cold working conditions E – Injuries	Personnel involved in the work	3	C	C3	15. In order to cope with hot working conditions ensure that enough fluids are taken and face and hands are wiped off regularly. (A) 16. Maintain proper housekeeping in work area (A) 17. Ensure to take sufficient breaks and monitor fatigue (A)		3	B	B3

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						18. Consider the characteristics of the working area like (A) a. Floor b. Space to manoeuvre c. route (length, stairs, thresholds) d. lighting 19. Wear suitable PPE as required for the task. (PPE) 20. When entering freezers or cold storage wear appropriate clothing (PPE)			
	H –Untrained / Uncertified personnel H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Injuries E – Damage to equipment E – Poisoning E – Fire	Personnel involved in the work	3	C	C3	21. Personnel must have certificate to work in the galley, minimum as required by Industry and Company (A) 22. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A)	3	A	A3

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						23. All personnel involved to comply with cultural awareness and no harassment policy (A) 24. Plan work schedule and regular breaks, comply with work and rest hours (A) 25. Comply with speak up policy (A) 26. Galley specific standing orders, if applicable (A) 27. Vessel specific galley familiarisation (A) 28. Exercise Stop the job authority as required (A)				
Emergency preparedness for potential emergency situation (Slip, trips & falls, Injury, Illness, Equipment failure, Explosion, Fire, etc.)	H – Slips, Trips & falls H – Personnel not familiar with work in galley H – Manufacturer instruction not followed H – Hygiene measures not followed H -Weather condition E – Death E – Injury	Crew on board	4	C	C4	29. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 30. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 31. Crew to be trained to respond to emergency by participating in		4	A	A4

Title/ Description	Workplace Risk Assessment - Galley Operations						GRA. No	FS-01-IMS03-001-B-022		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Ch 23		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E – Damage to equipment E - Poisoning					drills as per drill matrix and planned jobs (A) 32. Emergency equipment is available and maintained as per PMS (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Workplace Risk Assessment– Working in Engine Room					GRA. No	FS-01-IMS03-001-B-023			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Chapter 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. high, medium or low			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. high, medium or low
Engine room safe access and egress	H- Slips and trips H – Obstructions H – Unclear emergency route H – Unfamiliar personnel H – Watertight doors H – Pinch points, overhead structures H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Injury, fatality	Personnel in engine room	4	B	B4	1. Emergency escape route marked (En) 2. Watertight doors maintained as per PMS (En) 3. Handrails and stairs maintained and clean (En) 4. Antiskid pads maintained and used as applicable (En) 5. Engine room induction carried out (A) 6. All access and egress kept clear and unobstructed (A) 7. Engine room head count monitored by duty engineer (A) 8. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A)		3	A	A3

Title/ Description	Workplace Risk Assessment– Working in Engine Room					GRA. No	FS-01-IMS03-001-B-023			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Chapter 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>
						9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Comply with speak up policy (A) 12. Regular safety inspections (A) 13. C/E daily rounds in ER (A) 14. Regular checks on emergency lighting (A) 15. Good housekeeping practices (A) 16. Crew aware of 3-point contact technique when climbing stairs (A) 17. Establish instructions when operating watertight doors (A) 18. SLAM (A) 19. Stop the Job (A) 20. Appropriate PPE used in ER (PPE)				
Emergency preparedness for potential	H – Equipment failure H – Damaged tools H – Unfamiliar crew H – Inadequate PPE	Crew on board	4	C	C4	21. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A		4	A	A4

Title/ Description	Workplace Risk Assessment– Working in Engine Room					GRA. No	FS-01-IMS03-001-B-023			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Chapter 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating	
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emergency situation (Equipment failure, Fire, Electrical shock, Explosion, Injury, etc.)	E - Injury E – Death E – Damage to vessel E – Damage to equipment E – Flooding E – Pollution E – Fire					Emergency Response Checklists (A) 22. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 23. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 24. Emergency equipment is available and maintained as per PMS (A)				
Working on Systems - general	H – Movement of equipment H – Stored energy of equipment H – Inadequate planning/ Poor preparation or executions of the task H – Lighting H – Weather conditions H – Noise H: Use of Equipment H: Vibration E: Harm to body	Personnel involved in the work	4	C	C4	Control measures 1 to 24, as applicable 25. Isolate work area to prevent noise or vibration exposure, as required (I) 26. Isolate power supply, de energize. Follow Lock out Tag out (I) 27. Provide adequate lighting. (En) 28. Obtain PTW if applicable (A) 29. Pre-plan movements of equipment with identification of	3	B	B3	

Title/ Description	Workplace Risk Assessment– Working in Engine Room					GRA. No	FS-01-IMS03-001-B-023		
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Chapter 20		IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E – Injury, fatality E – Equipment damage					trip hazards, pinch points, obstructions, impediments, resources, set down/rest areas and paths (A) 30. Trip hazards and pinch points in work areas to be positively identified (A) 31. Remove all jewellery/accessories and lose clothing before work. (A) 32. Follow strictly manufacturers and other applicable instruction. (A) 33. Consider weather conditions and movement of the vessel (A) 34. Allow only competent and trained personnel to work on the systems. (A) 35. Properly plan and discuss the job. A TBT to be held. Roles and responsibilities to be recorded. (A) 36. Be aware of HAVS symptoms to allow early detection. Discuss			

Title/ Description	Workplace Risk Assessment– Working in Engine Room					GRA. No	FS-01-IMS03-001-B-023			
Reference Source	Code of Safe Working Practices for Merchant Seafarers – Chapter 20		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work	Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						hazard and safe working period in toolbox (A) 37. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 38. Planning of tasks including suitable breaks from noise/vibration exposure (A) 39. Do not bypass safety barriers, guards and controls without authorisation (A) 40. Use PPE as per PPE Matrix. (PPE)				
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Work Authorisation Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Preparation for helicopter operations	H- Crew not familiar with operations H- Conflicting tasks H- Slips, trips, falls H- Misunderstood, miscommunicated information H- Firefighting equipment not available/ operational H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E- Injury E- Equipment damage E- Poor preparation	Crew	3	C	C3	1. Control access to area of operations to only authorised personnel (I) 2. HLO and HDAs are suitably trained and qualified. (A) 3. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 4. All personnel involved to comply with cultural awareness and no harassment policy (A) 5. Plan work schedule and regular breaks, comply with work and rest hours (A) 6. Comply with speak up policy (A)	3	A	A3

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024			
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						7. Toolbox meeting to instruct and discuss task steps and procedure requirements (A) 8. Inspect helideck (A) 9. Use certified and maintained equipment as per PMS (A) 10. Ensure all firefighting equipment are checked and operational. All valves are in required positions and all personnel involved are familiar the equipment, their roles in an emergency and are aware of the start/ stop locations of pump (A) 11. Check fireman suits are ready and in good condition for immediate use. (A) 12. MOB boat / FRC prepared and ready for immediate deployment (A) 13. Bridge is sufficiently manned and conned as per procedure. (A) 14. Establish proper communications between all stations and bridge.				

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						Where available, other back up communications to be made ready. (A) 15. Verify weather forecast for the planned duration and is suitable for operation. Liaise with helicopter pilot prior beginning of flight (A) 16. Verify and establish MOPO. (A) 17. Ensure SIMOPS is complied with. (A) 18. Procedure for passengers departing from vessel complied with, safety briefings, safety video, etc (A) 19. Freight/ baggage weighed and manifested, able for manual handling (A) 20. Work areas to be adequately illuminated if task is performed during hours of darkness, and helideck certificate allows for night operations. (A)			

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						21. Advance notice given for helideck operations preparations and to cease conflicting operations. (A) 22. Signages and barriers in correct position to allow landing as required. (A) 23. Red status light checked prior operations. (A) 24. All hoisted/raised equipment in or around landing area to be lowered as per helideck specification (i.e. mast with lights when above height limit) (A) 25. HLO’s checklist reviewed and completed. (A) 26. Stop job authority. (A) 27. All involved to use proper PPE in accordance with PPE matrix (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure,	H – Equipment failure H – Unfamiliar crew H - Helicopter failure H – Unfamiliar Helicopter pilot E – MOB	Crew on board	5	C	C5	28. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	5	A	A5

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Helicopter failure, MOB, Helicopter crash, damage to equipment, Fire, Explosion, etc.)	E – Death E – Injury E – Damage to equipment E - Fire E - Explosion					29. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 30. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 31. Emergency equipment is available and maintained as per PMS (A)			
Helicopter Approach	H- Loss of communications H- Helicopter abnormalities H- Required personnel not in position H- Instructions as discussed in toolbox talk not being followed. E- Injury E- Equipment damage E- Fatality	Helicopter crew, vessel crew, passengers	5	C	C5	Control measures 1 to 31, as applicable 32. HLO/ HDAs in position. (A) 33. Communication checked and established between HLO/ Bridge/ heli pilot. Radio communication and hand signals to be used parallel. (A) 34. HLO instruction to be strictly followed. (A) 35. HLO to update on approach as requested, and report abnormalities to heli pilot immediately. (A)	5	B	B5

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire	
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Helipad securing after landing	H- Crew approach to helicopter not as per procedure/ instructions H- Crew unaware of rotating rotor H- Slips, trips, falls E- Injury E- Equipment damage E- Fatality	Helicopter crew, vessel crew, passengers	4	C	C4	Control measures 1 to 31, as applicable 36. Methodical approach to helicopter within safe zones. (I) 37. Safe access to helideck as instructed by HLO. (I) 38. When chock placement is requested by pilot, chock man access to outboard wheels via safe zone approach then front of helicopter staying <1m from helicopter without touching helicopter, tubes or aerials. (I) 39. Put handrails in place and secured. (En) 40. Await pilot thumbs up and red tail light turned off. (A) 41. HLO instruction to be strictly followed. (A) 42. Be aware of rotating rotors.(A)	3	B	B3
Helicopter loading, unloading cargo and passengers	H- Safe zone approach not established H- Passengers not familiarised	Helicopter crew, vessel crew, passengers	3	C	C3	43. Passengers are to be guided on and off helideck, number of passengers at helideck controlled as per instructions from HLO. (I)	2	B	B2

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024		
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures	Life Saving Rule		Work Authorisation Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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	H- Excessive manual handling H- Pinch points H- Passenger movement not organised H- Freight/ baggage loading/ unloading not organised E- Injury E- Equipment damage					44. Obtain correct boot allotment for freight/ baggage from pilot. (I) 45. Always ensure activities are carried out within the safe zones of helideck. (I) 46. Discuss pinch/ crush points during toolbox talks and precautions. (A) 47. Care taken when opening/closing baggage compartment (A) 48. Freight/baggage to be checked and loaded according to manifest (A) 49. Good manual handling techniques to be used when handling freight/baggage. (A) 50. HLO to organise passenger and freight movement as discussed during toolbox talks. (A) 51. During operations, follow HLO instructions. (A) 52. No freight/ baggage to be left unattended. (A)			

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024			
Reference Source	ICS Guide To Helicopter-Ship Operations IAMSAR Manual 2019 Volume III		IMS Procedure		FS-01-IMS14-001 - Deck Procedures		Life Saving Rule		Work Authorisation Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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Helicopter departure	H- Helideck not prepared for departure H- Required personnel not in position H- Instructions as discussed in toolbox talk not being followed. E- Injury E- Equipment damage E- Fatality	Helicopter crew, vessel crew, passengers	5	C	C5	Control measures 1 to 31, as applicable 53. Crew to be clear of the helideck prior departure and remain on standby until instructed by HLO/ bridge in coordination with Helicopter crew. (I) 54. Helideck to be clear of people before lift-off. (I) 55. Handrails to be put down and secured. (En) 56. Wheel chocks to be removed by HDA on HLO sign. (En) 57. Helideck to be clear of freight and baggage. (A)		5	B	B5
Completion of helicopter operations	H- Slips, trips, falls E- Injury	Vessel crew	2	B	B2	58. All equipment to be stored in order after use. (A) 59. Inspect all equipment after use for damage and confirm fit for use for next operation. Report any deficiencies. (A) 60. HLO to debrief task with crew. (A)		2	A	A2

Title/ Description	Helicopter Operations					GRA. No	FS-01-IMS03-001-B-024			
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Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022		Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney, Piotr Zawalski (Initial 2021)			Location	FS		Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak		Date	1 September 2022	
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Fatigue						GRA. No	FS-01-IMS03-001-B-025	
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA - 3A Wellbeing of vessel personnel MLC2006 - Regulation 2.3 – Hours of work and hours of rest		IMS Procedure	FS-01-IMS06-001 Shipboard Personnel Resources FS-01-IMS13-001 Bridge Procedures		Life Saving Rule	Work Authorisation		
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Mental & physical demands of work	H – Repetitive work, H – Sustained physical or mental effort H – Sustained and/or complex physical or mental tasks H – Time zone change effect H – Long work hours E – Deteriorating mental and/or physical health conditions E – Jet lag disorder E – Incident / accident E – Sleep disorder	Personnel on board	3	C	C3	1. No lone workers (S) 2. Maintain good house-keeping to minimise distractions (En) 3. Adequate light at all times at the work place (En) 4. Work as per planned schedule and in line with company requirements (A) 5. Ensure adequate breaks during shifts to allow recovery (A) 6. Allow supervisors and employees / workers to reschedule tasks if fatigue becomes a problem (A) 7. Reschedule or delegate to others (A)	3	A	A3

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						8. Contract of Employment to include (A) – Length of contract – Work and overtime hrs – Agreed frequency and length of leave and compensation periods			
Work scheduling & Planning - Shift work	H – Extensive length of shift H – Sustained physical or mental effort during shift E – Deteriorating mental and/or physical health conditions	Personnel on board working in shifts	3	C	C3	9. No overtime allowed, where possible (E) 10. With prolonged shifts consider an additional 8 hrs off a week (E) 11. Work as per planned schedule and in line with company requirements (A) 12. In case of overtime, allow recovery as soon as practicable (A) 13. Monitor and record Work and Rest Hours (A)	3	B	B3

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						14. Compliance with procedure for Watchkeeping (A) 15. Adequate Breaks during work (A) 16. Familiarise new personnel with work and rest hours (A)			
Work scheduling & Planning –Night Work	H – Loss of daylight over prolonged period of time H – Sustained physical or mental effort E – Deteriorating mental and/or physical health conditions E - Imbalance of biological clock	Personnel on night shift	3	D	D3	17. Schedule shifts in an effort for all crew to see daylight once a day (En) 18. Adapt a preferable 30 minutes before commencing night work (En) 19. Schedule complex tasks for daytime (A) 20. Avoid scheduling higher risk tasks on the first night of a night shift cycle, if possible (A) 21. When planning high risk task during night shift add additional controls such as job	3	B	B3

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						rotation or additional rest breaks (A) 22. If needed (for prolonged shifts), allow for changes in shifts by using a forward-rotation shift system ie morning to afternoon, afternoon to night (A) 23. Period of non-work following a sequence of night shifts to allow recovery, where possible (A) 24. Familiarise new crew posted on night shift on best practices for night work (A) 25. Adequate Breaks during work (A)			
Work scheduling & Planning – Extension of contract	H- Physical and Mental tiredness due to work beyond the normal contract period	Personnel on board	3	D	D3	26. Allow supervisors and employees/workers to reschedule tasks if fatigue becomes evident (E)	3	C	C3

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	H – Disruption of work-life balance, feeling homesick E – Deteriorating mental and/or physical health conditions					27. Schedule affected crew to work in daylight hours/day shifts and avoid night work (I) 28. Increase vessel bandwidth to provide good communication with families (phones or internet communicators) (En) 29. Ensure company provides regular updates on crew change/relief status and dates for all crew members, both on board of the vessel waiting to disembark and at home waiting to embark (A) 30. Consider scheduling extra time off to the affected crew member (A) 31. Encourage good social culture to keep a lookout for one another to identify fatigue. (A)			

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						32. All personnel involved to comply with cultural awareness and no harassment policy (A) 33. Consider affected crew's physical and mental conditions when planning and assigning tasks (A) 34. Extension of contract to be provided only upon management approval (A)			
Work Environment Conditions	H – (Prolonged) Exposure to hazardous substances and atmospheric contaminants H – (Prolonged) Exposure to noise H – (Prolonged) Exposure to extreme temperatures	Personnel onboard	4	C	C4	35. Eliminate or reduce exposure hours by controlling the severity of the hazardous source (reduce time exposure, PPE, intensity of hazard etc.) (E) 36. All sites shall have adequate facilities for relaxation, rest, sleep, meals and breaks (En) 37. The workplace and surroundings are well lit, safe and secure (En)	3	B	B3

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	H – (Prolonged) Exposure to vibration H – Reaching threshold limit value (TLV) H – (Prolonged) work in non-ergonomic environment E – Deteriorating mental and/or physical health conditions E – Incident / Accident E – Reduced productivity / performance E – Long term health effect					38. Accommodation comply with MLC standards, noise and vibration within acceptable limits (En) 39. Consider ergonomics at work site, to ensure ease at work (En) 40. Exposures are continuously monitored (COSHH Assessments) (A) 41. Strict adherence to COSHH procedure (A) 42. Strict adherence to noise and vibration procedure (A) 43. Appropriate clothing and PPE provided (PPE)				
Individual & Non-Work Factors	H – Personal situation at home	Personnel onboard	3	D	D3	44. All sleeping quarters to be quiet at all times (E)		3	B	B3

Title/ Description	Fatigue					GRA. No	FS-01-IMS03-001-B-025		
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	H – Sleep (amount and quality) H – Health H – Fitness for work H – Lifestyle factors H – Unhealthy social interaction with co-workers E – Deteriorating mental and/or physical health conditions E – Incident / Accident E – Sleep disorder					45. Fitness and exercise facilities available and maintained (En) 46. Restroom/dayroom to have adequate facilities: TV, books, music (En) 47. Meals cooked onboard taking in account the various crews, healthy variety of meals. (En) 48. Adequate facilities to contact home and keep in touch (En) 49. Accommodation comply with MLC standards: single rooms, if double rooms occupants on opposite shift (A) 50. Crew to be encouraged to exercise regularly (A) 51. Allow time to contact home (taking in account local time zones) (A) 52. Company to provide information and education			

Title/ Description	Fatigue					GRA. No	FS-01-IMS03-001-B-025			
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						about how non-work-related factors can increase the risks of fatigue (A) 53. Valid medical check for all crew before boarding (A) 54. Regular social or team building events on board to improve social cohesion (A) 55. Conflicts on board between co-workers to be addressed and solved amicably by HoD or escalated, as necessary (A) 56. Facilitate repatriation for urgent personal grounds (A) 57. Allow sufficient time off between contracts to maintain good work-life balance (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01	

Title/ Description	Fatigue						GRA. No	FS-01-IMS03-001-B-025			
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Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval		Julia Korpak		Date	1 September 2022
						Next Review date		31 August 2023			

Generic Risk Assessment

Title/ Description	Maintenance - Deck – Greasing (Pneumatic, Brush)					GRA. No	FS-01-IMS03-001-B-028		
Reference Source	Code of Safe Working Practices		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS12B-001 Technical Asset Management	Life Saving Rule	Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Task preparation	H – Communication failure H – Procedure lack of understanding H – Failure to plan the task H – Failure to identify hazards of work area H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Improper measures in place E – Injury E – Damage to equipment	Crew	1	C	C1	1. TBT with all involved, if required (A) 2. Use of equipment by competent and/or trained personnel (A) 3. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 4. All personnel involved to comply with cultural awareness and no harassment policy (A) 5. Plan work schedule and regular breaks, comply with work and rest hours (A) 6. Comply with speak up policy (A)	1	A	A1

Title/ Description	Maintenance - Deck – Greasing (Pneumatic, Brush)					GRA. No	FS-01-IMS03-001-B-028		
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						7. Monitor possible conflict with SIMOPS (A) 8. If required, PTW including LOTO procedure followed (A) 9. All PPE must be in good condition. (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure, Slip, trip & falls, electrical shock, Injury, etc.)	H – Crew incompetent for task H – Improper equipment selection or use E - Injury E – Damage to vessel E – Damage to 3rd party property	Crew involved	3	C	C3	10. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 11. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 12. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 13. Emergency equipment is available and maintained as per PMS (A)	3	A	A3

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Tool selection and equipment preparation	H - Greasing equipment not maintained H – Incorrect grease type used H – Equipment to be greased not prepared H: Use of Equipment H: Vibration E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E – Equipment damage E – Injury	Crew	2	D	D2	14. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 15. Use compatible grease as recommended by equipment manufacturer (En) 16. Use guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 17. Select the lowest vibration tool suitable for the job (En) 18. Equipment maintained as per manufacturer's instructions. (A) 19. Inspect work / equipment to be greased (A) 20. Thoroughly visually inspect / test the equipment before use (A) 21. Be aware of HAVS symptoms to allow early detection. Discuss	2	A	A2

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						hazard and safe working period in toolbox (A) 22. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 23. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 24. Noise exposure levels to be monitored by site supervisors. (A) 25. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 26. Planning of tasks including suitable breaks from noise/vibration exposure (A)			

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						27. Use only properly certified and maintained equipment as per manufacturer's instructions, PMS and suitable for marine environment and for the task (A)			
Greasing (Pneumatic, Brush) operation execution	H - Contact with moving parts H - Slip / trip on grease spilt on deck H – Unexpected release of stored energy E – Injury	Crew	3	D	D3	Control measures 1 to 27, as applicable 28. Remove any spilled grease (E) 29. Verify that machinery is isolated prior commencing work as per LOTO procedure, if required. (En) 30. Monitor weather condition during the task. (A) 31. Monitor possible conflict with SIMOPS (A) 32. Adequate supervision maintained. (A) 33. Good housekeeping maintained. (A)	2	A	A2

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Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description						GRA. No	FS-01-IMS03-001-B-029		
Confined Space Entry									
Reference Source	Code of Safe Working Practices for Merchant Seafarers 2019 For confined spaces see sections; 4.8, 4.9, 8.8, 9.4, 11.10, 14.1.1 but primarily Section 15 OVMSA – 15 Entering dangerous (confined) spaces		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work Appendix FS-01-IMS03-001-B Generic RA-Working at Height - operations and rescue (to be used if confined space entry/ rescue involves work at height)	Life Saving Rule	Confined Space		
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Preparation for work	H: Inadequate job preparation. H: Unaware of the hazards and controls. H: Communication means not well established. H: Untrained or unfamiliar crew with task. H: Unfavourable weather conditions for work in confined space H: Fatigue H: Poor mental health of crew involved	Persons involved	2	D	D2	1. Can we do the work without confined space entry? (E) 2. When planning consider adjacent spaces and assess the need to test and de-pressurize as required to reduce chances of any inter tank leakage of gas (En) 3. Use communication equipment that has no source of ignition if working in flammable / explosive atmosphere (En) 4. All spaces identified as a confined space to be clearly marked (A)	2	A	A2

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	H: Unfavourable work environment (stress, victimisation, etc.) E: Improper planning and preparation					5. Confined entry procedures including TBT, PTW and associated documentations in line with procedure must be carried out and strictly followed (A) 6. Ensure that sufficient resources and personnel are available for the operation (A) 7. Crew involved shall be trained as per training matrix, familiarised with task and understand their role and responsibilities in the operation (A) 8. Allocate appropriate supervision for the task (A)			

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						9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. All crew involved shall be fit for work in confined space. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 11. Plan work schedule and regular breaks, comply with work and rest hours (A) 12. All must be able to communicate effectively in the vessel working language (A) 13. Every crew member have the right to refuse entry into the			

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						confined space, comply with speak up policy (A) 14. Prepare rescue plan and establish escape route from confined space. In case work or rescue involves working at height, rescue plan work at height form to be used in conjunction (A) 15. A standby person shall be assigned, communication interval with personnel inside the confined space shall be established (A) 16. Establish communication means between those inside the space, outside the space, bridge (A)			

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						17. Agree on how to raise the alarm (A) 18. If hot work, work at height or other tasks are to be performed within a confined space, an additional permit to work must be issued to supplement the confined space entry permit (A) 19. Gas/atmosphere testing equipment is available of the approved type, correctly maintained as per PMS and calibrated (A) 20. No personnel shall enter the confined space until all safety requirements have been met and authorised PTW is issued (A)			

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						21. Adhere to Life Saving Rules (A) 22. The approval must be sought by the Master from the VM prior entering a confined space (A). 23. Check weather conditions and vessel movement suitable for work in confined space (A) 24. Establish and provide most appropriate PPE to be used for task (PPE) 25. Breathing apparatus is compulsory if the air inside the space cannot be made fit to breathe (PPE)			
Isolation Lock out tag out	H: Accidental contact with unexpected flow of substances	Personnel working on isolation/in	4	C	C4	26. Associated piping, cargo ventilation, electrical sources, hydraulic systems to be isolated	4	A	A4

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	H: Improper/inadequate LOTO of mechanical or electrical equipment E: Major injury, fatality E: flooding, equipment damage	or around confined space				as applicable (lockout/tag out) (En) 27. Electrical sources preferably disconnected by using switches remote from the equipment (En) 28. Mechanical moving parts within the confined space must be adequately secured (En) 29. Any cargo, ballast, fuel and hydraulic lines passing through the confined space should be isolated (En) 30. Identify the equipment that require isolation and appropriate lock out method to perform safe confined space entry (A)			

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						31. Adequate warning signs against operation clearly displayed at all applicable locations (A) 32. Check must be made to ensure isolation is effective. (A) 33. Follow procedure Lock out Tag out (A) 34. Follow procedure Working on Electrical Systems and High Voltage as applicable (A) 35. LOTO to be included in handover of watch/shift and appropriate verification to be carried out (A)			
Equipment – Tools selection	H: Use of intrinsically unsafe tools H: Use of inappropriate, inadequate tools for the task	Persons involved in task.	2	C	C2	36. During selection of tools consider spaces with a danger for explosions require intrinsically safe equipment and spaces with a	1	B	B1

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	H: Tools selected are not appropriately maintained E: Fire E: Injury E: Damaged equipment					high humidity require double isolated, low voltage equipment (≤ 50 Vac or ≤ 120 Vdc). Air tools remain preferred. Refer also to the Hand and power tools procedure. (En) 37. Provide sufficient and (if required) explosion proof lights. Naked light is not allowed (En) 38. Take inventory of tools taken into the confined space (A) 39. Ensure tools are suitable for task and maintained as per PMS (A)			
Additional circumstances to be risk assessed as applicable	H: Excessive heat conditions	Personnel working in confined space and	3	E	E3	40. Limit exposure time, take breaks (A) 41. Plenty of drinking water should be available. Drink water and salt	2	B	B2

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	E: Dangerous rise in core body temperature (heat stroke, unconsciousness) E: Change in respiration rate E: Increased stress	stand by at the entrant				intake. Fluid intake should equal fluid loss (A) 42. Take into consideration that PPE may contribute to heat stress (PPE)			
	H: Cold conditions E: Hypothermia E: Change in respiration rate E: Increased stress	Personnel working in confined space and stand by at the entrant	2	D	D2	43. Place suitable heating sources in the work area, if possible and safe (En) 44. Limit exposure time, take breaks (A) 45. Appropriate PPE for protection against extreme cold (PPE)	2	B	B2
	H: Noise and vibration E: hindered communication, E: hearing damage.	Personnel working in confined space and	2	D	D2	46. Reduce or eliminate source of noise or vibration if possible (E) 47. Establish effective communication taking into account noise levels in work area (En)	2	B	B2

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	E: Injury due to excess vibration (Hand arm vibration syndrome, etc.)	stand by at the entrant				48. Limit exposure. (A) 49. Select appropriate tools and calculate limits to exposure (A) 50. Use Hearing protection based on noise level (PPE)			
	H- Dust E- Poor visibility from dust particles E- Breathing difficulties	Personnel working in confined space	2	D	D2	51. The use of machinery and powered tools may require additional measures, such as dust extraction (En) 52. Maintain good housekeeping of the work area (En) 53. Use appropriate respirators or filters for the type of dust particles (PPE)	2	B	B2
	H: Residues (chemical, scale, rust, sludge or other)	Personnel working in confined	3	E	E3	54. Empty and strip the tank first to remove the contents (En)	2	B	B2

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	E: Hazardous gas, fume, vapours etc. can be released when disturbed.	space and stand by at the entrant				55. Personal gas detector always monitoring atmosphere during the permanence in confined space (En) 56. Recognize the possibility of gases desorbing from residues, oxygen depletion of the atmosphere as a result of oxidation or the ingress of airborne contaminants from adjacent sources (A) 57. Appropriate PPE in place (PPE)			
Opening manholes cover	H: Accidental release of vapours or gases or tank content/cargo H: Accidental entry H: Dropped object H: Pressurised tank	Person(s) involved in task, vessel crew	5	C	C5	58. Place guardrails or fencing to prevent accidental entry/fall in the confined space (I) 59. Loosen retaining nuts/bolts and lift the manhole cover checking	4	B	B4

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	H: Manual handling of manhole cover E: Injury E: Fatalities E: Equipment/structural damage E: Flooding/overflow E: Pollution					for pressurization before completely opening (En) 60. Open manholes as per plan for ventilation including the emergency exits (if provided) (En) 61. Verify content of tank by multiple means where possible, prior opening manholes, to ensure tank is empty (A) 62. Check overflow vents/flaps are in open positions (A) 63. Confirm tank is not pressurised before opening manhole (A) 64. Be aware of vessel movements, to prevent accidental fall in enclosed space (A)			

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						65. Use appropriate manual handling techniques in line with manual handling procedure (A) 66. Appropriate notices of opened tanks to be displayed on prominent location (A) 67. Clean and isolate the area around open manholes, do not enter (A) 68. Mark tanks open for ventilation: NO ENTRY (A)			
Ventilation, gas-freeing	H: (Highly) flammable gases present H: Toxic gases present H: Abnormal atmospheric conditions present E: Explosion E: Illness, fatality	Persons working in vicinity	5	C	C5	69. Fresh air to be drawn from point that is not contaminated (En) 70. Ventilate or exhaust the space mechanically with approved / intrinsically safe apparatus (En)	3	B	B3

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						71. Increase the number of openings to improve ventilation circulation, if required (En) 72. Ventilate for sufficient length of time considering confined space layout, previous content, capacity of ventilation equipment, air exchanges required for space etc. (En) 73. Ventilation equipment well maintained and inspected prior to use (A) 74. Ensure extracted air is safely dispersed by mechanical or natural means, away from vessel (A)			

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						75. Never introduce additional pure oxygen into a confined space (A) 76. Consider the layout of the space when ventilating to ensure thorough ventilation of area (A)			
Testing of the atmosphere	H: Testing equipment malfunction/not maintained H: Improper or inadequate testing method H: Untrained, unfamiliar crew in using equipment E: Dangerous atmosphere not detected leading to illness or fatality of persons involved	Persons involved	5	D	D5	77. Personnel testing the atmosphere to remain outside the tank (I) 78. Ventilation shall be stopped for at least 10 minutes before any tests are conducted shall not be restarted until all the tests are completed (En) 79. Testing to be carried out at multiple locations (En) 80. Atmosphere must be retested if there are any breaks in operation and/or ventilation (En)	3	B	B3

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						81. Follow testing regulations as per local authority requirements, as applicable (A) 82. Testing shall be carried out by trained and certified personnel only (A) 83. Testing equipment shall be maintained, calibrated and inspected before use (A) 84. Testing equipment to be operated as per manufacturer instructions (A) 85. Testing steps should be carried out as per procedure (A) 86. Confined space entry and testing form to be used, gases and atmosphere levels to be recorded				

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						and to be in line with recommended levels. (A) 87. Permits to specify which gases are to be tested for, but as a minimum should include O2, HC and toxic gases, prior to and during entry and which equipment is to be used (A)			
Emergency preparedness for potential emergency situation (Including flooding, explosion, contamination of confined space, etc.)	H: Emergency equipment not available/not maintained/not ready H: Emergency personnel not ready, untrained, unfamiliar H: Emergency plan not available H: Late discovery of emergency	Rescue team / Standby person/ Persons involved	5	D	D5	88. In the event of a casualty in a confined space, under no circumstance should the attendant nor any unauthorised personnel enter the tank without following the proper emergency procedures (A) 89. Required emergency response equipment including any medical	4	B	B4

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	H: Panic, stress E: Unsuccessful, poor, delayed rescue efforts, leading to worsening of injury/illness and fatalities					first response equipment as per rescue plan rigged and ready at the entrance of confined space (A) 90. Air bottles must be fully charged prior to the operation (A) 91. Standby person must be trained to follow established emergency procedures and use appropriate equipment and techniques to support the rescue team, but not be part of it (A). 92. Rescue personnel to participate in TBT and be familiar with operation and rescue plan (A)			

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						93. Drills and training for rescue from confined spaces carried out as schedule (A) 94. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A 95. Adhere to FS-01-IMS17-001 Emergency Response Manual 96. Keep an entry log also for rescue team (A) 97. Rescue team needs to be standby during duration of entry. Can perform other duties but must be ready for rescue on short notice (A) 98. Rescuer needs to be equipped to have appropriate protection to			

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						prevent they put themselves at risk of harm (A) 99. Emergency equipment is available and maintained as per PMS (A)			
Access	H: Protruding parts, obstructed access. H: Access hindered by ventilation or other equipment set up in the tank via the manhole. H: Entering prior proper preparation and approval H: Access means in poor condition; access means improperly set up H: Inadequate visibility H: Slips trips and falls	Personnel working on the job and Entrant	3	D	D3	100. Test all communication before start (En) 101. Ventilation or any equipment set through the manhole cannot hinder access into the space (En) 102. Access points clear of obstructions, fittings or equipment that can impede safe operations or rescue, good housekeeping to be practiced (En)	2	B	B2

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	E: Injury, E: Hindered rescue					103. Access area properly illuminated (En) 104. Personnel entering the confined space must have a portable gas/O2 detector continuously monitoring the atmosphere (A) 105. Ensure access means are appropriate for access and egress (A) 106. Standby person to maintain contact with the personnel accessing the confined space (A) 107. Keep an entry log (A)			
Confined Space – Safe execution of work	H: Harmful or dangerous gases present in atmosphere H: Weather conditions	Personnel working in confined space and Entrant	5	C	C5	Control measures 1 to 107, as applicable	4	B	B4

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	H: Interrupted communication H: Persons in distress in confined space. H: Slips trips and falls H: Malfunction of gas monitoring devices H: Use of improper tools for work or for the work area E: Injury, Fatality					108. Monitor weather conditions and movement of the vessel, stop work if conditions deteriorate (E) 109. Atmosphere must be monitored throughout the operation with personal gas detectors (A) 110. Supervisor shall monitor and verify that work is being performed in line with PTW and associated TRA (A) 111. Due consideration must be given to pockets of harmful gases that may exist in corners (A) 112. The standby watch must monitor and maintain entry log which includes the name of the entrants			

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						and the time(s) they entered and exited the confined space. (A) 113. Regular check communication system (A) 114. SLAM (A) 115. Stop the Job (A) 116. Monitor work execution and leave the confined space immediately if a potentially dangerous situation arises or in case of any doubt (A) 117. Maintain good housekeeping during the work execution to prevent creating obstacles or trip hazards (A)			

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Execution of hot work in confined space	H: Combustible gas, materials E: Fire, Explosion	All personnel on board	5	C	C5	Control measures 1 to 117 as applicable Control measures of Hot Work GRA as applicable 118. Local forced ventilation should be provided to avoid accumulation of fumes (En). 119. Ensure PTW includes appropriate measures for hot work, hot work procedure followed (A) 120. Consider adjacent tanks and spaces to be made gas free when hot work is performed on bulkheads or there is risk of gas leakage from adjacent spaces (A) 121. Fire watch present (A)	4	B	B4

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						122. Training and drills in firefighting and first aid carried out in line with PMS (A)			
Execution of work at height in confined spaces	H: Fall from height E: Injury, fatality	Personnel involved	4	C	C4	Control measures 1 to 122, as applicable Control measures of work at height GRA as applicable 123. Ensure PTW includes appropriate measures for working at height, Working at Height and over the side procedure followed (A) 124. A rescue plan from Confined Space shall incorporate rescue at height (A) 125. Wear fall prevention devices in line with PPE matrix (PPE)	4	B	B4

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Work Completion	H: Trip hazards, H: Left behind tools H: Improperly secured manholes H: Improper removal of LOTO H: Confined space not fit for purpose after work completion E: Injury E: Equipment damage, flooding E: Contaminated tank content	All personnel on board	3	D	D3	126. Once work is completed the confined space need to be restored to working conditions and fit for purpose (A) 127. The confined space must be closed only after appropriate inspection by authorities as per PTW to verify the job site has been left in a safe, clean and orderly condition and the work performed meets the required scope and specifications (A) 128. The Performing Authority must ensure that the space is clear of workers and debris and used tools have been removed (A). 129. PTW appropriately closed out (A)	3	B	B3

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						130. All locked, isolated, or tagged out systems are restored (A)			
Rescue from confined spaces	H: Hazardous atmosphere H: Time pressure H: Emotion / adrenalin H: Untrained, unfamiliar crew with rescue E: Injury, fatality E: Delay of rescue	Rescue team, injured person(s)	5	D	D5	Control measures 88 to 99 131. Use the prepared rescue plan (A) 132. Try to find out the source of the emergency (A) 133. Do not enter the space, only authorised rescue team shall enter the space for the rescue (A) 134. Lack of oxygen or airborne contaminants, entry for rescue team shall be sufficiently prepared and protected (A) 135. Dedicated team on site to assist with first aid duties of rescued victim (A)	5	A	A5

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Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Thiha, Irfan Afzal (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	00		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Confined Space – Ballast/Fuel Tank Entry					GRA. No	FS-01-IMS03-001-B-030		
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Preparation for work	H: Inadequate job preparation. H: Unaware of the hazards and controls. H: Communication means not well established. H: Untrained or unfamiliar crew with task. H: Unfavourable weather conditions for work in confined space H: Fatigue H: Poor mental health of crew involved	Persons involved	2	D	D2	1. Can we do the work without confined space entry? (E) 2. Carry out necessary de-ballast and/or bunker movements to maintain stability and empty the confined spaces. (En) 3. Use communication equipment that has no source of ignition if working in flammable / explosive atmosphere (En) 4. When planning consider adjacent spaces and assess the need to test and de-pressurize as	2	A	A2

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	H: Unfavourable work environment (stress, victimisation, etc.) E: Improper planning and preparation					required to reduce chances of any inter tank leakage of gas (En) 5. All spaces identified as a confined space to be clearly marked (A) 6. Confined entry procedures including TBT, PTW and associated documentations in line with procedure must be carried out and strictly followed (A) 7. If ballast movements required, follow BWMP (A) 8. Ensure that sufficient resources and personnel are available for the operation (A)			

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						9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. All crew involved shall be fit for work in confined space. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 11. Plan work schedule and regular breaks, comply with work and rest hours (A) 12. Crew involved shall be trained as per training matrix, familiarised with task and understand their role and responsibilities in the operation (A)			

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						13. Allocate appropriate supervision for the task (A) 14. All must be able to communicate effectively in the vessel working language (A) 15. Every crew member have the right to refuse entry into the confined space, comply with speak up policy (A) 16. Prepare rescue plan and establish escape route from confined space. In case work or rescue involves working at height, rescue plan work at height form to be used in conjunction (A) 17. A standby person shall be assigned, communication interval			

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						with personnel inside the confined space shall be established (A) 18. Establish communication means between those inside the space, outside the space, bridge (A) 19. Agree on how to raise the alarm (A) 20. If hot work, work at height or other tasks are to be performed within a confined space, an additional permit to work must be issued to supplement the confined space entry permit (A) 21. No personnel shall enter the confined space until all safety			

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						requirements have been met and authorised PTW is issued (A) 22. Adhere to Life Saving Rules (A) 23. The approval must be sought by the Master from the VM prior entering a confined space (A). 24. Check weather conditions and vessel movement suitable for work in confined space (A) 25. Establish and provide most appropriate PPE to be used for task (PPE) 26. Breathing apparatus is compulsory if the air inside the space cannot be made fit to breathe (PPE)			

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Isolation Lock out tag out	H: Accidental contact with unexpected flow of substances H: Improper/inadequate LOTO of mechanical or electrical equipment E: Major injury, fatality E: flooding, equipment damage	Personnel working on isolation/in or around confined space	4	C	C4	27. Associated piping, cargo ventilation, electrical sources, hydraulic systems to be isolated as applicable (lockout/tag out) (En) 28. Electrical sources preferably disconnected by using switches remote from the equipment (En) 29. Mechanical moving parts within the confined space must be adequately secured (En) 30. Any cargo, ballast, fuel and hydraulic lines passing through the confined space should be isolated (En) 31. Identify the equipment that require isolation and appropriate	4	A	A4

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						lock out method to perform safe confined space entry (A) 32. Adequate warning signs against operation clearly displayed at all applicable locations (A) 33. Check must be made to ensure isolation is effective. (A) 34. Follow procedure Lock out Tag out (A) 35. Follow procedure Working on Electrical Systems and High Voltage as applicable (A) 36. LOTO to be included in handover of watch/shift and appropriate verification to be carried out (A)			

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Equipment – Tools selection	H: Use of intrinsically unsafe tools H: Use of inappropriate, inadequate tools for the task H: Tools selected are not appropriately maintained H – Noise H: Vibration E: Explosion, fire, E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration)	Persons involved in task.	2	C	C2	37. Reduce or eliminate source of noise if possible (E) 38. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 39. Establish effective communication taking into account noise levels in work area (En) 40. During selection of tools consider spaces with a danger for explosions require intrinsically safe equipment and spaces with a high humidity require double isolated, low voltage equipment (≤ 50 Vac or ≤ 120 Vdc). Air tools	1	B	B1

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	syndrome), white finger, etc. E: Fire E: Injury E: Damaged equipment					remain preferred. Refer also to the Hand and power tools procedure. (En) 41. Use equipment only if PAT tested (En) 42. Use guards as required in line with manufacturer instructions, and check emergency button where fitted (En) 43. Select the lowest vibration tool suitable for the job (En) 44. Provide sufficient and explosion proof lights. Naked light is not allowed (En) 45. Thoroughly visually inspect / test the equipment before use (A)			

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						46. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 47. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A) 48. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 49. Noise exposure levels to be monitored by site supervisors. (A) 50. Work share/rotation of task is recommended to reduce			

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						individual exposure to noise (and vibration). (A) 51. Planning of tasks including suitable breaks from noise/vibration exposure (A) 52. Take inventory of tools taken into the confined space (A) 53. Ensure tools are suitable for task and maintained as per PMS (A) 54. Use Hearing protection based on noise level (PPE)			
Additional circumstances to be risk assessed as applicable	H: Excessive heat conditions E: Dangerous rise in core body temperature (heat stroke, unconsciousness)	Personnel working in confined space and stand by at the entrant	3	E	E3	55. Plenty of drinking water should be available. Drink water and salt intake. Fluid intake should equal fluid loss (A) 56. Limit exposure time, take breaks (A)	2	B	B2

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	E: Change in respiration rate					57. Take into consideration that PPE may contribute to heat stress (PPE)			
	H: Cold conditions E: Hypothermia E: Change in respiration rate	Personnel working in confined space and stand by at the entrant	2	D	D2	58. Limit exposure time, take breaks (A) 59. Appropriate PPE for protection against extreme cold (PPE)	2	B	B2
	H: Noise E: hindered communication,	Personnel working in confined space and stand by at the entrant	2	D	D2	60. Reduce or eliminate source of noise if possible (E) 61. Establish effective communication taking into account noise levels in work area (En) 62. Limit exposure. (A) 63. Use Hearing protection based on noise level (PPE)	2	B	B2

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	H- Dust E- Poor visibility from dust particles E- Breathing difficulties	Personnel working in confined space	2	D	D2	64. The use of machinery and powered tools may require additional measures, such as dust extraction (En) 65. Maintain good housekeeping of the work area (En) 66. Use appropriate respirators or filters for the type of dust particles (PPE)	2	B	B2
	H: Movement and interaction with tank residues or with by-product of the work carried out (chemical, scale, rust, sludge, ballast sediments or other) H: Unsafe disposal of residues	Personnel working in confined space and stand by at the entrant	3	D	D3	67. Empty and strip the tank first to remove the contents (En) 68. Personal gas detector always monitoring atmosphere during the permanence in confined space (En) 69. Handle residues with appropriate tools or equipment (En)	2	B	B2

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	E: Hazardous gas, fume, vapours etc. can be released when disturbed. E: Environmental impact					70. Follow appropriate measures for safe handling and disposal (En) 71. Recognize the possibility of gases desorbing from residues, oxygen depletion of the atmosphere as a result of oxidation or the ingress of airborne contaminants from adjacent sources (A) 72. Appropriate PPE in place (PPE)			
Opening manholes cover	H: Accidental release of vapours or gases or tank content/cargo H: Accidental entry H: Dropped object H: Pressurised tank H: Manual handling of manhole cover	Person(s) involved in task, vessel crew	5	C	C5	73. Place guardrails or fencing to prevent accidental entry/fall in the confined space (I) 74. Loosen retaining nuts/bolts and lift the manhole cover checking for pressurization before completely opening (En)	4	B	B4

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	E: Injury E: Fatalities E: Equipment/structural damage E: Flooding/overflow E: Pollution					75. Open manholes as per plan for ventilation including the emergency exits (if provided) (En) 76. Verify content of tank by multiple means where possible, prior opening manholes, to ensure tank is empty (A) 77. Check overflow vents/flaps are in open positions (A) 78. Confirm tank is not pressurised before opening manhole (A) 79. Use appropriate manual handling techniques in line with manual handling procedure (A) 80. Be aware of vessel movements, to prevent accidental fall in enclosed space (A)			

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						81. Appropriate notices of opened tanks to be displayed on prominent location (A) 82. Clean and isolate the area around open manholes, do not enter (A) 83. Mark tanks open for ventilation: NO ENTRY (A)			
Ventilation, gas-freeing	H: (Highly) flammable gases present H: Toxic gases present H: Abnormal atmospheric conditions present E: Explosion E: Illness, fatality	Persons working in vicinity	5	C	C5	84. Fresh air to be drawn from point that is not contaminated (En) 85. Ventilate or exhaust the space mechanically with approved / intrinsically safe apparatus (En) 86. Increase the number of openings to improve ventilation circulation, if required (En) 87. Ventilate for sufficient length of time considering confined space	3	B	B3

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						layout, previous content, capacity of ventilation equipment, air exchanges required for space etc. (En) 88. Ventilation equipment well maintained and inspected prior to use (A) 89. Ensure extracted air is safely dispersed by mechanical or natural means, away from vessel (A) 90. Never introduce additional pure oxygen into a confined space (A) 91. Consider the layout of the space when ventilating to ensure thorough ventilation of area (A)			

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						92. Breathing apparatus is compulsory if the air inside the space cannot be made fit to breathe (PPE)			
Testing of the atmosphere	H: Testing equipment malfunction/not maintained H: Improper or inadequate testing method H: Untrained, unfamiliar crew in using equipment E: Dangerous atmosphere not detected leading to illness or fatality of persons involved	Persons involved	5	D	D5	93. Personnel testing the atmosphere to remain outside the tank (I) 94. Ventilation shall be stopped for at least 10 minutes before any tests are conducted shall not be restarted until all the tests are completed (En) 95. Testing to be carried out at multiple locations (En) 96. Atmosphere must be retested if there are any breaks in operation and/or ventilation (En)	3	B	B3

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						97. Follow testing regulations as per local authority requirements, as applicable (A) 98. Depending on local regulations, gas free certificate to be obtained prior entry (A) 99. Testing shall be carried out by trained and certified personnel only (A) 100. Testing equipment shall be maintained, calibrated and inspected before use (A) 101. Testing equipment to be operated as per manufacturer instructions (A) 102. Testing steps should be carried out as per procedure (A)			

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						103. Confined space entry and testing form to be used, gases and atmosphere levels to be recorded and to be in line with recommended levels. (A) 104. Permits to specify which gases are to be tested for, but as a minimum should include O2, HC and toxic gases, prior to and during entry and which equipment is to be used (A)			
Emergency preparedness	H: Emergency equipment not available/not maintained/not ready H: Emergency personnel not ready, untrained, unfamiliar	Rescue team / Standby person/ Persons involved	5	D	D5	105. In the event of a casualty in a confined space, under no circumstance should the attendant nor any unauthorised personnel enter the tank without	4	B	B4

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	H: Emergency plan not available H: Late discovery of emergency H: Panic, stress E: Unsuccessful, poor, delayed rescue efforts, leading to worsening of injury/illness and fatalities					following the proper emergency procedures (A) 106. Required emergency response equipment including any medical first response equipment as per rescue plan rigged and ready at the entrance of confined space (A) 107. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 108. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 109. Crew to be trained to respond to emergency by participating in			

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						drills as per drill matrix and planned jobs (A) 110. Emergency equipment is available and maintained as per PMS (A) 111. Air bottles must be fully charged prior to the operation (A) 112. Standby person must be trained to follow established emergency procedures and use appropriate equipment and techniques to support the rescue team, but not be part of it (A). 113. Rescue personnel to participate in TBT and be familiar with operation and rescue plan (A)			

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						114. Drills and training for rescue from confined spaces carried out as schedule (A) 115. Keep an entry log also for rescue team (A) 116. Rescue team needs to be standby during duration of entry. Can perform other duties but must be ready for rescue on short notice (A) 117. Rescuer needs to be equipped to have appropriate protection to prevent they put themselves at risk of harm (A)			
Access	H: Protruding parts, obstructed access.	Personnel working on	3	D	D3	118. Test all communication before start (En)	2	B	B2

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	H: Access hindered by ventilation or other equipment set up in the tank via the manhole. H: Entering prior proper preparation and approval H: Access means in poor condition; access means improperly set up H: Inadequate visibility H: Slips trips and falls E: Injury, E: Hindered rescue	the job and Entrant				119. Ventilation or any equipment set through the manhole cannot hinder access into the space (En) 120. Access points clear of obstructions, fittings or equipment that can impede safe operations or rescue, good housekeeping to be practiced (En) 121. Access area properly illuminated (En) 122. Personnel entering the confined space must have a portable gas/O2 detector continuously monitoring the atmosphere (A)			

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						123. Ensure access means are appropriate for access and egress (A) 124. Standby person to maintain contact with the personnel accessing the confined space (A) 125. Keep an entry log (A)			
Confined Space – Safe execution of work	H: Harmful or dangerous gases present in atmosphere H: Weather conditions H: Interrupted communication H: Persons in distress in confined space. H: Slips trips and falls H: Malfunction of gas monitoring devices	Personnel working in confined space and Entrant	5	C	C5	Control measures 1 to 125, as applicable 126. Monitor weather conditions and movement of the vessel, stop work if conditions deteriorate (E) 127. Atmosphere must be monitored throughout the operation with personal gas detectors (A) 128. Supervisor shall monitor and verify that work is being	4	B	B4

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	H: Use of improper tools for work or for the work area E: Injury, Fatality					performed in line with PTW and associated TRA (A) 129. Due consideration must be given to pockets of harmful gases that may exist in corners (A) 130. The standby watch must monitor and maintain entry log which includes the name of the entrants and the time(s) they entered and exited the confined space. (A) 131. Regular check communication system (A) 132. SLAM (A) 133. Stop the Job (A) 134. Monitor work execution and leave the confined space immediately if a potentially			

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						dangerous situation arises or in case of any doubt (A) 135. Maintain good housekeeping during the work execution to prevent creating obstacles or trip hazards (A)			
Execution of hot work in confined space	H: Combustible gas, materials E: Fire, Explosion	All personnel on board	5	C	C5	Control measures 1 to 135, as applicable Control measures of Hot Work GRA as applicable 136. Local forced ventilation should be provided to avoid accumulation of fumes (En). 137. Ensure PTW includes appropriate measures for hot work, hot work procedure followed (A)	4	B	B4

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						138. Consider adjacent tanks and spaces to be made gas free when hot work is performed on bulkheads or there is risk of gas leakage from adjacent spaces (A) 139. Fire watch present (A) 140. Training and drills in firefighting and first aid carried out in line with PMS (A)			
Execution of work at height in confined spaces	H: Fall from height E: Injury, fatality	Personnel involved	4	C	C4	Control measures 1 to 140, as applicable Control measures of work at height GRA as applicable 141. Ensure PTW includes appropriate measures for working at height, Working at Height and over the side procedure followed (A)	4	B	B4

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						142. A rescue plan from Confined Space shall incorporate rescue at height (A) 143. Wear fall prevention devices in line with PPE matrix (PPE)			
Work Completion	H: Trip hazards, H: Left behind tools H: Improperly secured manholes H: Improper removal of LOTO H: Confined space not fit for purpose after work completion E: Injury E: Equipment damage, flooding	All personnel on board	3	D	D3	144. Once work is completed the confined space need to be restored to working conditions and fit for purpose (A) 145. The confined space must be closed only after appropriate inspection by authorities as per PTW to verify the job site has been left in a safe, clean and orderly condition and the work performed meets the required scope and specifications (A)	3	B	B3

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	E: Contaminated tank content					146. The Performing Authority must ensure that the space is clear of workers and debris and used tools have been removed (A) 147. PTW appropriately closed out (A) 148. All locked, isolated, or tagged out systems are restored (A) 149. When contents of the tank are restored, monitor level and watertightness of manholes (A)			
Rescue from confined spaces	H: Hazardous atmosphere H: Time pressure H: Emotion / adrenalin H: Untrained, unfamiliar crew with rescue E: Injury, fatality E: Delay of rescue	Rescue team, injured person(s)	5	D	D5	Control measures 105 to 117, as applicable 150. Use the prepared rescue plan (A) 151. Try to find out the source of the emergency (A)	5	A	A5

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						152. Do not enter the space, only authorised rescue team shall enter the space for the rescue (A) 153. Lack of oxygen or airborne contaminants, entry for rescue shall be sufficiently prepared and protected (A) 154. Dedicated team to site to assist with first aid duties of rescued victim (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Thiha, Irfan Afzal (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)				Location	FS	Rev. No	00
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		

Generic Risk Assessment

Title/ Description	Confined Space – Fresh Water Tank Entry					GRA. No	FS-01-IMS03-001-B-031		
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Preparation for work	H: Inadequate job preparation. H: Unaware of the hazards and controls. H: Communication means not well established. H: Untrained or unfamiliar crew with task. H: Unfavourable weather conditions for work in confined space H: Fatigue H: Poor mental health of crew involved	Persons involved	2	D	D2	1. Can we do the work without confined space entry? (E) 2. Carry out necessary ballast movements to maintain stability and empty the confined spaces. (En) 3. When planning consider adjacent spaces and assess the need to test and de-pressurize as required to reduce chances of any inter tank leakage of gas (En) 4. All spaces identified as a confined space to be clearly marked (A)	2	A	A2

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	H: Unfavourable work environment (stress, victimisation, etc.) E: Improper planning and preparation					5. Confined entry procedures including TBT, PTW and associated documentations in line with procedure must be carried out and strictly followed (A) 6. Ensure that sufficient resources and personnel are available for the operation (A) 7. Crew involved shall be trained as per training matrix, familiarised with task and understand their role and responsibilities in the operation (A) 8. All personnel involved to comply with cultural awareness and no harassment policy (A)			

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						9. All crew involved shall be fit for work in confined space. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Allocate appropriate supervision for the task (A) 12. All must be able to communicate effectively in the vessel working language (A) 13. Every crew member have the right to refuse entry into the			

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						<p>confined space, comply with speak up policy (A)</p> <p>14. Prepare rescue plan and establish escape route from confined space. In case work or rescue involves working at height, rescue plan work at height form to be used in conjunction (A)</p> <p>15. A standby person shall be assigned, communication interval with personnel inside the confined space shall be established and not exceed 15 minutes (A)</p> <p>16. Establish communication means between those inside the space, outside the space, bridge (A)</p>			

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						17. Agree on how to raise the alarm (A) 18. If hot work, work at height or other tasks are to be performed within a confined space, an additional permit to work must be issued to supplement the confined space entry permit (A) 19. Gas/atmosphere testing equipment is available of the approved type, correctly maintained as per PMS and calibrated (A) 20. No personnel shall enter the confined space until all safety requirements have been met and authorised PTW is issued (A)			

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						21. Adhere to Life Saving Rules (A) 22. The approval must be sought by the Master from the VM prior entering a confined space (A). 23. Check weather conditions and vessel movement suitable for work in confined space (A) 24. Establish and provide most appropriate PPE to be used for task (PPE) 25. Breathing apparatus is compulsory if the air inside the space cannot be made fit to breathe (PPE)			
Isolation Lock out tag out	H: Accidental contact with unexpected flow of substances	Personnel working on isolation/in or around	4	C	C4	26. Associated piping, cargo ventilation, electrical sources, hydraulic systems to be isolated	4	A	A4

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	H: Improper/inadequate LOTO of mechanical or electrical equipment E: Major injury, fatality E: flooding, equipment damage	confined space				as applicable (lockout/tag out) (En) 27. Electrical sources preferably disconnected by using switches remote from the equipment (En) 28. Mechanical moving parts within the confined space must be adequately secured (En) 29. Any cargo, ballast, fuel and hydraulic lines passing through the confined space should be isolated (En) 30. Check must be made to ensure isolation is effective. (A) 31. Follow procedure Lock out Tag out (A)			

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						32. Identify the equipment that require isolation and appropriate lock out method to perform safe confined space entry (A) 33. Follow procedure Working on Electrical Systems and High Voltage as applicable (A) 34. LOTO to be included in handover of watch/shift and appropriate verification to be carried out (A) 35. Adequate warning signs against operation clearly displayed at all applicable locations (A)			
Equipment – Tools selection	H: Use of intrinsically unsafe tools H: use of inappropriate, inadequate tools for the task	Persons involved in task.	2	C	C2	36. Reduce or eliminate source of noise if possible (E)	1	B	B1

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	H: tools selected are not appropriately maintained H – Noise H: Vibration E: Explosion, fire, E: Harm to body E: HAVS (Hand Arm Vibration Syndrome) E: Poor quality standards of equipment used E – Occupational health injuries, such as Induced hearing loss; Tinnitus, HAVS (Hand arm vibration syndrome), white finger, etc. E: Fire E: Injury E: Damaged equipment					37. Use of Hand arm vibration calculator or tool specifications to establish safe working period (I) 38. During selection of tools consider spaces with a danger for explosions require intrinsically safe equipment and spaces with a high humidity require double isolated, low voltage equipment (≤ 50 Vac or ≤ 120 Vdc). Air tools remain preferred. Refer also to the Hand and power tools procedure. (En) 39. Use equipment only if PAT tested (En) 40. Use guards as required in line with manufacturer instructions,			

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						and check emergency button where fitted (En) 41. Select the lowest vibration tool suitable for the job (En) 42. Establish effective communication taking into account noise levels in work area (En) 43. Provide sufficient lights. (En) 44. Thoroughly visually inspect / test the equipment before use (A) 45. Be aware of HAVS symptoms to allow early detection. Discuss hazard and safe working period in toolbox (A) 46. Maximum trigger times of tools to be known in line with Noise and Vibration procedure. (A)			

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						47. Supervisors to monitor vibration exposure using the calculator belonging to and in line with Noise and Vibration procedure (A) 48. Noise exposure levels to be monitored by site supervisors. (A) 49. Work share/rotation of task is recommended to reduce individual exposure to noise (and vibration). (A) 50. Planning of tasks including suitable breaks from noise/vibration exposure (A) 51. Take inventory of tools taken into the confined space (A)			

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						52. Ensure tools are suitable for task and maintained as per PMS (A) 53. Use Hearing protection based on noise level (PPE)			
Additional circumstances to be risk assessed as applicable	H: Excessive heat conditions E: Dangerous rise in core body temperature (heat stroke, unconsciousness) E: Change in respiration rate	Personnel working in confined space and stand by at the entrant	3	E	E3	54. Limit exposure time, take breaks (A) 55. Plenty of drinking water should be available. Drink water and salt intake. Fluid intake should equal fluid loss (A) 56. Take into consideration that PPE may contribute to heat stress (PPE)	2	B	B2
	H: Cold conditions E: Hypothermia E: Change in respiration rate	Personnel working in confined space and	2	D	D2	57. Place suitable heating sources in the work area, if possible and safe (En)	2	B	B2

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		stand by at the entrant				58. Limit exposure time, take breaks (A) 59. Appropriate PPE for protection against extreme cold (PPE)			
	H: Noise E: hindered communication, E: hearing damage. ALL GREEN TO BE REMOVED	Personnel working in confined space and stand by at the entrant	2	D	D2	60. Reduce or eliminate source of noise if possible (E) 61. Establish effective communication taking into account noise levels in work area (En) 62. Limit exposure. (A) 63. Use Hearing protection based on noise level (PPE)	2	B	B2
	H- Dust E- Poor visibility from dust particles E- Breathing difficulties	Personnel working in confined space	2	D	D2	64. The use of machinery and powered tools may require additional measures, such as dust extraction (En)	2	B	B2

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						65. Maintain good housekeeping of the work area (En) 66. Use appropriate respirators or filters for the type of dust particles (PPE)			
	H: Residues or by-product of the work carried out (chemical, scale, rust, or other) E: Contamination of the tank E: Hazardous gas, fume, vapours etc. as a result of the work activities	Personnel working in confined space, all crew	3	C	C3	67. Empty and strip the tank first to remove the contents (En) 68. Personal gas detector always monitoring atmosphere during the permanence in confined space (En) 69. Work scope to include measures to eliminate risk of tank contamination, such as: use of appropriate paint for FW tank, methods of cleaning and disinfection of the tank, etc. (A)	2	A	A2

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						70. Appropriate PPE taking into account sensitivity of tank contamination (PPE)			
Opening manholes cover	H: Accidental entry H: Dropped object H: Pressurised tank H: Manual handling of manhole cover E: Injury E: Fatalities E: Equipment/structural damage E: Flooding/overflow	Person(s) involved in task	4	C	C4	71. Place guardrails or fencing to prevent accidental entry/fall in the confined space (I) 72. Loosen retaining nuts/bolts and lift the manhole cover checking for pressurization before completely opening (En) 73. Open manholes as per plan for ventilation including the emergency exits (if provided) (En) 74. Verify content of tank by multiple means where possible, prior opening manholes, to ensure tank is empty (A)	3	B	B3

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						75. Check overflow vents/flaps are in open positions (A) 76. Confirm tank is not pressurised before opening manhole (A) 77. Be aware of vessel movements, to prevent accidental fall in enclosed space (A) 78. Use appropriate manual handling techniques in line with manual handling procedure (A) 79. Appropriate notices of opened tanks to be displayed on prominent location (A) 80. Clean and isolate the area around open manholes, do not enter (A) 81. Mark tanks open for ventilation: NO ENTRY (A)			

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Ventilation	H: Abnormal atmospheric conditions present E: Illness, fatality	Personnel working in confined space,	4	C	C4	82. Fresh air to be drawn from point that is not contaminated (En) 83. Ventilate or exhaust the space mechanically with suitable apparatus (En) 84. Ventilate for sufficient length of time considering confined space layout, previous content, capacity of ventilation equipment, air exchanges required for space etc. (En) 85. Increase the number of openings to improve ventilation circulation, if required (En) 86. Ventilation equipment well maintained and inspected prior to use (A)	3	A	A3

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						87. Ensure extracted air is safely dispersed by mechanical or natural means, away from vessel (A) 88. Never introduce additional pure oxygen into a confined space (A) 89. Consider the layout of the space when ventilating to ensure thorough ventilation of area (A)			
Testing of the atmosphere	H: Testing equipment malfunction/not maintained H: Improper or inadequate testing method H: Untrained, unfamiliar crew in using equipment	Persons involved	4	C	C4	90. Personnel testing the atmosphere to remain outside the tank (I) 91. Testing to be carried out at multiple locations (En) 92. Atmosphere must be retested if there are any breaks in operation and/or ventilation (En)	3	A	A3

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	E: Dangerous atmosphere not detected					93. Ventilation shall be stopped for at least 10 minutes before any tests are conducted shall not be restarted until all the tests are completed (En) 94. Follow testing regulations as per local authority requirements, as applicable (A) 95. Testing shall be carried out by trained and certified personnel only (A) 96. Testing equipment shall be maintained, calibrated and inspected before use (A) 97. Testing equipment to be operated as per manufacturer instructions (A)			

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						98. Testing steps should be carried out as per procedure (A) 99. Confined space entry and testing form to be used, gases and atmosphere levels to be recorded and to be in line with recommended levels. (A) 100. Permits to specify which gases are to be tested for, but as a minimum should include O2, HC and toxic gases, prior to and during entry and which equipment is to be used (A)			
Emergency preparedness	H: Emergency equipment not available/not maintained/not ready	Rescue team / Standby person/	5	D	D5	101. In the event of a casualty in a confined space, under no circumstance should the attendant nor any unauthorised	4	B	B4

Title/ Description	Confined Space – Fresh Water Tank Entry					GRA. No	FS-01-IMS03-001-B-031		
Reference Source	Code of Safe Working Practices for Merchant Seafarers 2019 For confined spaces see sections; 4.8, 4.9, 8.8, 9.4, 11.10, 14.1.1 but primarily Section 15 OVMSA – 15 Entering dangerous (confined) spaces	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work Appendix FS-01-IMS03-001-B Generic RA-Working at Height - operations and rescue (to be used if confined space entry/ rescue involves work at height)			Life Saving Rule	Confined Space		
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	H: Emergency personnel not ready, untrained, unfamiliar H: Emergency plan not available H: Late discovery of emergency H: Panic, stress E: Unsuccessful, poor, delayed rescue efforts, leading to worsening of injury/illness and fatalities	Persons involved				personnel enter the tank without following the proper emergency procedures (A) 102. Required emergency response equipment including any medical first response equipment as per rescue plan rigged and ready at the entrance of confined space (A) 103. Air bottles must be fully charged prior to the operation (A) 104. Standby person must be trained to follow established emergency procedures and use appropriate equipment and techniques to support the rescue team, but not be part of it (A).			

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						105. Rescue personnel to participate in TBT and be familiar with operation and rescue plan (A) 106. Drills and training for rescue from confined spaces carried out as schedule (A) 107. Keep an entry log also for rescue team (A) 108. Rescue team needs to be standby during duration of entry. Can perform other duties but must be ready for rescue on short notice (A) 109. Rescuer needs to be equipped to have appropriate protection to prevent they put themselves at risk of harm (A)			

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Access	H: Protruding parts, obstructed access. H: Access hindered by ventilation or other equipment set up in the tank via the manhole. H: Entering prior proper preparation and approval H: Access means in poor condition; access means improperly set up H: Inadequate visibility H: Slips trips and falls E: Injury, E: Hindered rescue	Personnel working on the job and Entrant	3	D	D3	110. Test all communication before start (En) 111. Ventilation or any equipment set through the manhole cannot hinder access into the space (En) 112. Access points clear of obstructions, fittings or equipment that can impede safe operations or rescue, good housekeeping to be practiced (En) 113. Access area properly illuminated (En) 114. Personnel entering the confined space must have a portable gas/O2 detector continuously monitoring the atmosphere (A)	2	B	B2

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						115. Ensure access means are appropriate for access and egress (A) 116. Standby person to maintain contact with the personnel accessing the confined space (A) 117. Keep an entry log (A)			
Confined Space – Safe execution of work	H: Harmful or dangerous gases present in atmosphere H: Weather conditions H: Interrupted communication H: Persons in distress in confined space. H: Slips trips and falls H: Malfunction of gas monitoring devices	Personnel working in confined space and Entrant	4	C	C4	Control measures 1 to 117, as applicable 118. Monitor weather conditions and movement of the vessel, stop work if conditions deteriorate (E) 119. Atmosphere must be monitored throughout the operation with personal gas detectors (A) 120. Supervisor shall monitor and verify that work is being	4	B	B4

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Reference Source	Code of Safe Working Practices for Merchant Seafarers 2019 For confined spaces see sections; 4.8, 4.9, 8.8, 9.4, 11.10, 14.1.1 but primarily Section 15 OVMSA – 15 Entering dangerous (confined) spaces	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work Appendix FS-01-IMS03-001-B Generic RA-Working at Height - operations and rescue (to be used if confined space entry/ rescue involves work at height)			Life Saving Rule	Confined Space		
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	H: Use of improper tools for work or for the work area E: Injury, Fatality					performed in line with PTW and associated TRA (A) 121. The standby watch must monitor and maintain entry log which includes the name of the entrants and the time(s) they entered and exited the confined space. (A) 122. Regular check communication system (A) 123. SLAM (A) 124. Stop the Job (A) 125. Monitor work execution and leave the confined space immediately if a potentially dangerous situation arises or in case of any doubt (A)			

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						126. Maintain good housekeeping during the work execution to prevent creating obstacles or trip hazards (A)			
Execution of hot work in confined space	H: Combustible gas, materials E: Fire, Explosion	All personnel on board	5	C	C5	Control measures 1 to 126, as applicable Control measures of Hot Work GRA as applicable 127. Local forced ventilation should be provided to avoid accumulation of fumes (En). 128. Ensure PTW includes appropriate measures for hot work, hot work procedure followed (A) 129. Consider adjacent tanks and spaces to be made gas free when hot work is performed on	4	B	B4

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						bulkheads or there is risk of gas leakage from adjacent spaces (A) 130. Fire watch present (A) 131. Training and drills in firefighting and first aid carried out in line with PMS (A)			
Execution of work at height in confined spaces	H: Fall from height E: Injury, fatality	Personnel involved	4	C	C4	Control measures 1 to 131, as applicable Control measures of work at height GRA as applicable 132. Ensure PTW includes appropriate measures for working at height, Working at Height and over the side procedure followed (A) 133. A rescue plan from Confined Space shall incorporate rescue at height (A)	4	B	B4

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						134. Wear fall prevention devices in line with PPE matrix (PPE)			
Work Completion	H: Trip hazards H: Left behind tools H: Improperly secured manholes H: Improper removal of LOTO H: Confined space not fit for purpose after work completion E: Injury E: Equipment damage, flooding E: Contaminated tank content	All personnel on board	4	D	D4	135. Appropriate cleaning regime as planned, to disinfect the tank (En) 136. Shock treatment or chlorination of tank in line with procedures (En) 137. Once work is completed the confined space need to be restored to working conditions and fit for purpose (A) 138. The confined space must be closed only after appropriate inspection by authorities as per PTW to verify the job site has been left in a safe, clean and orderly condition and the work	3	B	B3

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						performed meets the required scope and specifications (A) 139. The Performing Authority must ensure that the space is clear of workers and debris, used tools have been removed, and appropriate cleaning was carried out (A). 140. PTW appropriately closed out (A) 141. All locked, isolated, or tagged out systems are restored (A)			
Rescue from confined spaces	H: Hazardous atmosphere H: Time pressure H: Emotion / adrenalin H: Untrained, unfamiliar crew with rescue E: Injury, fatality	Rescue team, injured person(s)	5	D	D5	Control measures 101 to 109, as applicable 142. Use the prepared rescue plan (A) 143. Try to find out the source of the emergency (A)	5	A	A5

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	E: Delay of rescue					144. Do not enter the space, only authorised rescue team shall enter the space for the rescue (A) 145. Lack of oxygen or airborne contaminants, entry for rescue shall be sufficiently prepared and protected (A) 146. Dedicated team to site to assist with first aid duties of rescued victim (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Thiha, Irfan Afzal (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations					GRA. No	FS-01-IMS03-001-B-032		
Reference Source	Code of Safe Working Practices ICS Bridge procedure guide		IMS Procedure		FS-01-IMS13-001 Bridge Procedures	Life Saving Rule		Line of Fire	
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Anchoring operations preparation	H- Misunderstanding of procedures. H- Miscommunication H- Unfamiliar crew with process/equipment H- Selection of improper/ not maintained equipment H- Improper selection of anchor location H- Improper determination of anchor holding capability H- Adverse weather H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimisation, etc.) E- Injury E- Equipment or vessel damage	Personnel involved in the work	2	C	C2	1. Equipment used is maintained as per Planned Maintenance System (En) 2. Ensure anchor lights and day signals are available and in working order (En) 3. Area of operations well lit (En) 4. Select suitable communication means and backup and test before operations (En) 5. Follow the manufacturer's instructions and Mooring unmooring and anchoring procedure (A) 6. Contact local authorities for anchoring instruction and location, as applicable (A) 7. Prepare anchoring operation plan based on the anchoring TRA (anchor drop location, number of	1	B	B1

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations						GRA. No	FS-01-IMS03-001-B-032		
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Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>
						shackles in the water, approach speed and heading, turning circles, weather conditions and forecast, etc) (A) 8. For operations in extreme weather ensure appropriate measures are taken (cold climate, extreme heat, etc.) (A) 9. All personnel involved to participate in TBT and discuss and review anchor plan and TRA (A) 10. All personnel involved to comply with cultural awareness and no harassment policy (A) 11. All crew involved shall be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 12. Plan work schedule and regular breaks, comply with work and rest hours (A)				

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations					GRA. No	FS-01-IMS03-001-B-032		
Reference Source	Code of Safe Working Practices ICS Bridge procedure guide		IMS Procedure		FS-01-IMS13-001 Bridge Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						13. Comply with speak up policy (A) 14. Anchor team supervisor to be clearly identified (A) 15. Personnel involved to be trained, competent and familiar with process and equipment used (A) 16. Personnel involved is rested and fit for work (A) 17. Use only approved and certified equipment (A) 18. PPE selected in line with PPE matrix and in good condition (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure, Pollution, Injury, MOB, etc.)	H – Equipment failure H – Incompetent crew H – Communication H – Weather condition E – Equipment damage E - Injury E – Death E – Damage to vessel E – Loss of anchor E - Pollution	Crew involved	4	C	C4	19. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 20. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 21. Crew to be trained to respond to emergency by participating in	4	A	A4

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations					GRA. No	FS-01-IMS03-001-B-032		
Reference Source	Code of Safe Working Practices ICS Bridge procedure guide		IMS Procedure		FS-01-IMS13-001 Bridge Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E = Elimination S = Substitution I = Isolation En = Engineering Controls A = Administration PPE = Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						drills as per drill matrix and planned jobs (A) 22. Emergency equipment is available and maintained as per PMS (A)			
Anchoring Operations: Heave / Walk Down / Drop	H - Brake Failure, Hydraulic failure, anchor windlass malfunction H – Sparks causing fire hazards H - Loose parts flying, body impact and injury. H - Pinch points H – Slips trips and falls E – Injury, fatality E - Spills / oil pollution	Personnel involved in the work	4	C	C4	Control measures 1 to 22, as applicable 23. Monitor weather conditions and amend/abort operation as necessary (E) 24. Area out of limits to non-essential personnel (I) 25. Rotational parts covered (En) 26. Anti-slip painting on deck (En) 27. SOPEP spill kit available (En) 28. Pre-checks of equipment as per TBT and in line with manufacturer instructions (A) 29. Restricted access / snap zones known (A) 30. 'Stop the Job' Policy (A) 31. Use SLAM before starting the operations (A)	4	A	A4

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations					GRA. No	FS-01-IMS03-001-B-032		
Reference Source	Code of Safe Working Practices ICS Bridge procedure guide		IMS Procedure		FS-01-IMS13-001 Bridge Procedures	Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						32. Observation camera's with monitors on Bridge (if equipped) (A) 33. Proper housekeeping (A) 34. Maintain communication between anchoring team and bridge (A)			
Securing operations after anchor dropped	H - Brake Failure, Hydraulic failure, anchor windlass malfunction H - Loose parts flying, body impact and injury. H - Pinch points H – Slips trips and falls E – Equipment damage E – Injury, fatality	Personnel involved in the work	4	C	C4	35. Upon agreed shackles in the water, secure brakes and report anchor chain status to bridge (En) 36. Secure anchor chain, verify disengagement of windlass and secure anchor station (En) 37. Monitor anchor and chain movement until it is ensured is holding (A) 38. Set up anchor day signal or lights as appropriate (A) 39. Exit anchoring station only when order from bridge is received (A)	4	A	A4
Securing operations upon heaving up anchor	H - Brake Failure, Hydraulic failure, anchor windlass malfunction	Personnel involved in the work	4	C	C4	40. Appropriate washing of chain in place (En)	4	A	A4

Title/ Description	Anchoring – Arrival and Departure, Including Windlass Operations					GRA. No	FS-01-IMS03-001-B-032			
Reference Source	Code of Safe Working Practices ICS Bridge procedure guide		IMS Procedure		FS-01-IMS13-001 Bridge Procedures	Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E = Elimination S = Substitution I = Isolation En = Engineering Controls A = Administration PPE = Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H - Loose parts flying, body impact and injury. H - Pinch points H – Slips trips and falls E – Equipment damage E – Injury, fatality					41. Secure and wash anchor once home (En) 42. Ensure vessel ready for departure (A) 43. Monitor anchor chain while heaving up (A) 44. Remove anchor day or light signals as appropriate (A) 45. Secure anchor station and report to bridge (A) 46. Exit anchoring station only when order from bridge is received (A)				
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Miguel Ganuza, Melvin Fernandes (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description	Drill Training - MOB/FRC - Launch & Recovery & Operation					GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure	IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). <u>Note:</u> Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Preparation of MOB/FRC for launching	H: Movement of vessel H: Unfamiliar crew H: Inadequate communications. H: Unavailable Instructions H: MOB/ FRC not maintained H: MOB/FRC improper access H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Injury	Personnel involved	3	C	C3	1. Heading of vessel suitable for launching (En) 2. Ensure access to MOB/FRC is suitable and safe (En) 3. Ensure MOB/ FRC and associated accessories maintained as per PMS/ manufacture’s recommendations including maintenance of required certification. (En) 4. Ensure MOB/ FRC is always maintained in ready to launch mode including maximum amount of fuel. (En) 5. Consider weather conditions (A) 6. Comply with MOPO for safe operations. (A)	3	A	A3

Title/ Description		Drill Training - MOB/FRC - Launch & Recovery & Operation				GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning	IMS Procedure	IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E: Equipment damage					7. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 8. All personnel involved to comply with cultural awareness and no harassment policy (A) 9. Plan work schedule and regular breaks, comply with work and rest hours (A) 10. Comply with speak up policy (A) 11. Ensure crew involved in MOB/FRC operations have received formal training and are familiar with operations. (A) 12. Ensure not the entire composition of crew involved in			

Title/ Description	Drill Training - MOB/FRC - Launch & Recovery & Operation						GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						MOB/FRC operation is participating for the first time (A) 13. Ensure launch and recovery instruction are available, understood by all personnel involved and strictly followed. (A) 14. Conduct TBT, assign responsibilities. (A) 15. Monitor time required for deployment of MOC/FRC, to ensure requirement as per SOLAS Chapter III regulations are complied with (A) 16. Visually inspect the MOB/FRC prior full crew boarding (A) 17. Proceed with lashing removal and prepare MOB/FRC for launching (A) 18. Use appropriate PPE (PPE)				

Title/ Description		Drill Training - MOB/FRC - Launch & Recovery & Operation				GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning	IMS Procedure	IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Emergency preparedness for potential emergency situation (Equipment failure, MOB, Capsize of MOB/FRC, damage to equipment, Loss of MOB/FRC, etc.)	H – Equipment failure H – Unfamiliar crew H – Weather condition E – Loss of rescue boat E – Death E – Injury E – Damage to equipment E - MOB	Crew involved	4	C	C4	19. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 20. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 21. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 22. Emergency equipment is available and maintained as per PMS (A)	4	A	A4
Launch of MOB/FRC boat at sea	H: Misunderstanding, not following instructions H: Adverse weather H: Malfunction/failure of equipment H Time pressure, urgency	Launch team MOB crew MOB	5	B	B5	Control measures 1 to 22, as applicable 23. After cast off from mother vessel, move away to prevent accidental contact (I)	4	A	A4

Title/ Description	Drill Training - MOB/FRC - Launch & Recovery & Operation						GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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	H: Uncontrolled movement of vessel E: Injury, fatality E: Damage to equipment E: Failure to rescue					24. Regular drills carried out as per schedule (A) 25. Personnel to follow instructions as agreed in TBT and as directed by team leader (A) 26. Follow ship specific launch/recovery procedure (A) 27. Maintain communication with bridge (A) 28. Monitor weather (A)				
Operations with MOB/FCR	H: Misunderstanding, not following instructions H: Adverse weather H: Malfunction/failure of equipment H Time pressure, urgency E: Injury, fatality E: Damage to equipment E: Failure to rescue	MOB crew MOB	4	C	C4	Control measures 1 to 22, as applicable 29. Recovery MOB with appropriate means (En) 30. Safe approach to MOB (En) 31. Monitor weather conditions (A) 32. Monitor traffic in vicinity (A) 33. Communication with bridge (A)		3	B	B3

Title/ Description						Drill Training - MOB/FRC - Launch & Recovery & Operation		GRA. No	FS-01-IMS03-001-B-034	
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						34. Place MOB in appropriate location and provide first aid, as applicable (A) 35. Based on MOB health conditions, plan safe recovery of MOB to mother vessel (A)				
Recovery of MOB/FRC boat	H: Misunderstanding, not following instructions H: Adverse weather H: Malfunction/failure of equipment H Time pressure, urgency H: Uncontrolled movement of vessel E: Injury, fatality E: Damage to equipment E: Failure to rescue	Launch team MOB crew MOB	5	B	B5	Control measures 1 to 28, as applicable 36. Return MOB boat to recovery position and start recovery operation (En) 37. Secure boat once safely landed (En) 38. Inspect after operations to ensure integrity (A) 39. Refuel and stock take equipment, as required (A)		4	A	A4
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	

Title/ Description	Drill Training - MOB/FRC - Launch & Recovery & Operation						GRA. No	FS-01-IMS03-001-B-034		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 11 - Emergency Preparedness and Contingency Planning		IMS Procedure		IMS17 – Emergency Response, FS-01-IMS03-001 Health & Safety at Work SOLAS Training Manual		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Thiha, Irfan Afzal (Initial 2021)		Tommaso Perelli, Muru Palaney (Initial 2021)			Location		FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval		Julia Korpak	Date	1 September 2022	
					Next Review date		31 August 2023			

Generic Risk Assessment

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>
Planning of lifting operations	H - Misunderstanding of procedures H - Uncoordinated task or action execution H – Unfamiliar/Untrained operators with the equipment and accessories to be used H – Unclear communication line H – Uneven load distribution H – Unsuitable weather for operations H – SIMOPS H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.)	Crew & Contractors involved in operation	2	C	C2	1. The operation will stop if there is any deviation from the plan or if any complication arises. (E) 2. Consider other operations ongoing in the area, SIMOPS to be managed to ensure no conflicts arise (I) 3. Area to be well illuminated including pick-up and touchdown areas (En) 4. Verify vessel stability, back deck load plan, take it in account possibility of excessive listing during lift (En) 5. For routine lifts the responsible person will check and approve the generic routine Lift Plan (LP) and generic risk assessment (A)		1	B	B1

Title/ Description						Mechanical Lifting- General Crane Operations	GRA. No	FS-01-IMS03-001-B-035			
Reference Source		Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks		A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
		Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.		Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
		E – Improper task preparation E – Excessive listing					6. For non-routine lifts a lift specific Risk Assessment (RA) and lift plan will be performed and documented by the lift team (A) 7. Personnel to familiarise themselves with the Lifting procedures and with the vessel specific Work Instructions for Lifting Operations, where provided (A) 8. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. Plan work schedule and regular breaks, comply with work and rest hours (A)				

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						11. Comply with speak up policy (A) 12. Only trained personnel to be part of the lifting operation (A) 13. Involved personnel to familiarise themselves with the Code of Hand Signals (A) 14. Comply with PTW procedure, if applicable (A) 15. Lifting team to be aware of their designated tasks and responsibilities before the operation commences (A) 16. Toolbox talk (TBT) prior to starting operation, including any 3 rd party contractors involved. (A) 17. Obtain weather forecast, weather limits of crane operations not to be exceeded (A) 18. Protective equipment to be worn as per Fugro PPE Matrix (PPE)				

Title/ Description	Mechanical Lifting- General Crane Operations					GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations	Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Emergency preparedness for potential emergency situation (Equipment failure, Damage to cargo, Capsize, List, Injury, etc.)	H – Loss of stability H – Equipment failure H – Not following procedures and requirements E – Death E – Injury E – Damage to equipment and cargo E – List E - Capsize	Crew	4	C	C4	19. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 20. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 21. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 22. Emergency equipment is available and maintained as per PMS (A)	4	A	A4
Selection of suitable equipment and accessories for the lift	H – Equipment, records and certificates not maintained H – Use of not properly maintained or damaged equipment and accessories	Crew	3	C	C3	23. Quarantine all lifting equipment and accessories that are found not certified or damaged (E) 24. All selected lifting equipment and accessories to have sufficient SWL and suitable for the load being lifted (En)	2	B	B2

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E – Use of expired or poorly maintained lifting equipment or accessories E – Lifting failure					25. Implementation of planned maintenance system ensuring that all lifting equipment is inspected and tested (A) 26. All selected lifting equipment and accessories to be provided with valid certificate and marked with the correct color coding (A) 27. All lifting equipment properly marked with WLL (A)				
Selection of 3 rd party equipment and accessories for the lift	H - Working with 3rd party crew/equipment H – Equipment, records and certificates not maintained H – Use of not properly maintained or damaged equipment and accessories E – Use of expired or poorly maintained lifting equipment or accessories	Contractors, Deck crew	3	C	C3	Control measures 23 to 27 28. Selected contractor to undergo assurance checks as required, in line with procurement procedure (A)		2	C	C2

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035	
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations	Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E – Lifting failure								
Preparation for lifting operations	H - Lift area, lift path not clear/empty H - Malfunction of lifting equipment H - Personnel not in correct position, not ready H - Damaged load or cargo packing E - Equipment damage E - Lifting failure	Deck Crew	3	C	C3	Control measures 1 to 28, as applicable 29. Isolate lifting area, not involved personnel to be kept clear (I) 30. Verify that lift path is clear of obstructions, loads shall not be lifted over personnel, pressurized equipment, well test equipment or areas where diving operations are being carried out (I) 31. Crane pre-start up checks completed (En) 32. Cargo visually inspected for damages and appropriately strapped or packed for lifting (En) 33. Ensure lifting team in position as discussed in TBT (A) 34. Crane in position and set up appropriately for operation (A) 35. Carry out visual inspection of accessories and cargo rigging	2	B	B2

Title/ Description	Mechanical Lifting- General Crane Operations					GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations	Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						points before connecting, by competent person (A) 36. Connect accessories as required in line with lift plan (A) 37. Connect tag lines, as required (A)			
Preparation of lifting operations at berth (between ship and quay side)	H – Vessel not safely berthed H – Quay side traffic / obstructions H – Inadequate/improper mooring configuration E – Inadequate preparation leading to injury E – Equipment/property damage	Involved crew, contractors	3	D	D3	Control measures 1 to 37, as applicable 38. Monitor and deviate traffic outside of lifting zone (I) 39. Ensure lifting operation does not hinder safe access to vessel. Stop gangway transits during lift, if required (I) 40. Mooring configuration checked to ensure is suitable for the lifting operation (En) 41. Monitor tidal changes, ensure mooring and fendering in place for the operation (En)	3	B	B3

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						42. Monitor passing sea side traffic, consider movement of own vessel affecting lifting operation (A)				
Lifting Operations	H - Crane/accessories failure H - Falling load, unbalanced /top heavy load H – Uncontrolled movement of load E - Injury, fatality E – Load fall overboard, pollution E – Equipment damage, loss	Lifting team, crew	4	D	D4	Control measures 1 to 42, as applicable 43. Monitor weather and stop if limits are exceeded (E) 44. Personnel to keep clear, lifting team to ensure compliance (I) 45. Control load movement with tag lines (En) 46. Crane to be driven smoothly to prevent excessive movements of load (En) 47. Start lift when all lifting team members are in position and ready (A) 48. Established lift plan to be followed (A) 49. When starting the lift, hold the load shot above ground and		4	A	A4

Title/ Description	Mechanical Lifting- General Crane Operations					GRA. No	FS-01-IMS03-001-B-035			
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations	Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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						verify integrity of rigging and load holding (A) 50. Keep clear communication between all parties (A) 51. SLAM technique applied (A) 52. Stop the Job authority (A)				
Secure operation after completion of lift(s)	H – Slips trips falls H – Poor housekeeping E - Injury E – Equipment damage or loss	Lifting team	2	D	D2	53. Check cargo is in good order and does not obstruct safe access (I) 54. Check lifting accessories prior returning to storage (A) 55. Wind down, store back in stowed position and visually inspect crane after use (A) 56. Clear landing area and remove lifting zone barriers (A) 57. Close PTW and conduct debrief, if applicable (A)		1	B	B1
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Jurgen Kerssen, Marcos Figueira (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)				Location	FS	Rev. No	01	

Title/ Description	Mechanical Lifting- General Crane Operations						GRA. No	FS-01-IMS03-001-B-035		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA 6D Offshore operations - Lifting and hoisting		IMS Procedure		FS-01-IMS15A-001 - Lifting Operations		Life Saving Rule		Safe Mechanical Lifting	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
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Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval		Julia Korpak	Date	1 September 2022	
					Next Review date		31 August 2023			

Generic Risk Assessment

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31		IMS Procedure		FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures	Life Saving Rule	Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Internal Preparation	H: Inadequate crew familiarisation and knowledge about operation H: Failure of Power Management and start up H: Operations insufficiently planned and coordinated H: Adverse weather H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Poor planning leading to accident during operations	Crew Involved the Operation	2	D	D2	1. Check stability and ballast the vessel as required prior to the lifting, to avoid excessive list (En) 2. Follow procedures and checklist when starting equipment (A) 3. Procedure for entering 500m zone including pre-entry checklists complied with (A) 4. Comply with PTW procedure (A) 5. Competent, Certified, Experienced crew to perform the job (A) 6. Supervisor of the operation to be established (A) 7. Lift Plan available (A) 8. TBT Prior Operation (A) 9. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A)	1	B	B1

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures	Life Saving Rule	Safe Mechanical Lifting				
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						10. All personnel involved to comply with cultural awareness and no harassment policy (A) 11. Plan work schedule and regular breaks, comply with work and rest hours (A) 12. Comply with speak up policy (A) 13. All personnel involved to comply with cultural awareness and no harassment policy (A) 14. FS-01-IMS15A-001 Lifting Operation understood and complied with (A) 15. If vessel crane is used, ensure crane is suitable and certified for offshore lifting (A) 16. Offshore crane to be maintained and in operations condition in line with manufacturer and PMS (A) 17. Comply with MOPO (A) 18. Weather conditions to be within required limits(A) 19. Weather forecast to be available and consulted (A)			

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
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						20. Verify sufficient power is available for the use of crane (A) 21. Use of adequate PPE in line with PPE matrix (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure, Blackout, Loss of position, Pollution, Collision, etc.)	H – SWL H – Loss of position H – Equipment failure H – Incompetent crew E – Collision E – Damage to equipment E – List E – Capsize E – Death E – Injury E – Pollution	Crew, 3 rd party	5	C	C5	22. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 23. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 24. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 25. Emergency equipment is available and maintained as per PMS (A)	5	A	A5
Preparation with Platform	H: Inadequate crew familiarisation and knowledge about operation H: Failure of equipment, Power Management, start up and Machinery	Own vessel, Platform	3	D	D3	26. Establish communication for coordination and emergency response including back up communications (En) 27. Discuss with platform OM details of operations. (A)	2	B	B2

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H: Communication not established between parties involved H: Adverse weather E: Poor planning leading to accident during operations E: Loss of Position holding capabilities during operations					28. Agree on appropriate approach and mooring or DP station keeping during operations. (A) 29. If vessel is to perform DP station keeping, agree on closest point of approach for suitable crane reach. (A) 30. If vessel performs operation on DP, assess approach with regards to drift-on or drift-off scenario, and ensure compliance with DP assurance procedure (A) 31. Risk assess vessel's DP capability including appropriate referencing system while on DP station keeping at platform. (A) 32. If vessel is on DP station keeping, ASOG established. (A) 33. Discuss other operations/ SIMOPs at platform and ensure there is no conflict for safe operations. (A) 34. Establish escape routes taking into account worst case failure. (A)			

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						35. Weather monitoring, Follow the MOPO (A) 36. Confirm stability arrangements are in place for prior to starting the transfer (A) 37. Review lift plan (A) 38. Confirm all required lifting equipment, accessories and load are in working order and maintained (A)			
Approach to platform and setting up for operations	H: Unsafe approach H: Mooring failure H: DP station keeping failure H: Manual Handling H: Environmental/weather Condition H: Working close to the sides H: Misunderstood communications H: Machinery failure	Own vessel, Supply Platform	5	D	D5	Control measures 1 to 38, as applicable 39. Approach at safe speed (En) 40. Maintain clear communication (En) 41. Use mooring lines that are certified and in good condition (En) 42. Use of appropriate fendering (En) 43. Test machinery and equipment prior approach (A) 44. Completed 500m zone checklists and all other agreed declarations	B	5	B5

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E: Injury, Fatality E: Man over board E: Damage to vessel, platform and equipment					completed and passed to platform OM. (A) 45. Bridge and engine room appropriately manned. (A) 46. Obtain permission from OM prior to entry into 500m zone. (A) 47. Mooring as per plan or when in position DP station keeping appropriately set up. (A)			
Lifting Operations / Crane Operations	H: Not following lift plan H: Incorrect, improper fastening of the load H: Dropped object H: Uncontrolled motion of crane blocks and cargo H: Equipment failure or defective H: SIMOP H: Pinch points H: Manual Handling H: Environmental Condition	Own vessel, Platform	5	D	D5	Control measures 1 to 38, as applicable 48. Allow in the area only the personnel involved in the operation (I) 49. Barricade the area (I) 50. Tag Lines provided to hook and control the lifted cargo (En) 51. Maintain good communication (En) 52. Lifting team members in position as per plan (A) 53. Follow Lift Plan, number of lifts limited as per plan (A) 54. Never exceed SWL (A)	5	B	B5

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H: Working close to the sides H: Mooring failure H: DP station keeping failure E: Injury, Fatality E: Man over board E: Listing of Vessel E: Damage to vessel and equipment E: Environmental pollution					55. Lifting gears have the correct colour code and valid certificates, Inspect prior use. (A) 56. Follow strictly the equipment manufacturer's instructions (A) 57. Monitor weather throughout the operation (A) 58. If vessel is moored, monitor position of vessel and mooring arrangements (A) 59. If vessel is on DP station keeping, monitor position and status of machinery and thruster loads. Always follow ASOG and raise the necessary alerts (A) 60. Apply SLAM (A) 61. Stop the job if necessary (A) 62. Ensure appropriate tool and PPE are used (PPE)			
Offshore lift completion	H: Slips, Trips and Falls H: Poor Housekeeping E: Injury E: Equipment damage	Lift team	2	C	C2	63. Clear work area of obstructions and barriers (E) 64. Report and shut down procedures for equipment followed. (En)	2	B	B2

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						65. Check equipment and accessories used for wear and tear, before storing and stowing (A) 66. Store equipment back on proper locations (A) 67. Inspect cargo for damages (A)			
Cast off / departure	H: Unsafe cast off H: Manual Handling H: Environmental/weather condition H: Working close to the sides H: Misunderstood communications H: Machinery failure E: Injury, Fatality E: Man over board E: Damage to vessel, platform and equipment	Own vessel, Platform	4	C	C4	68. Retrieve fendering only after vessel is at safe distance (En) 69. Maintain clear communication (En) 70. Depart at safe speed (En) 71. Obtain permission from OM platform to leave 500m zone as soon as lifting operations are completed. (A) 72. If vessel is moored, prepare vessel for departure in line with departure checklist, if required (A) 73. If vessel is moored, let go of mooring lines as per agreed plan (A) 74. Close out PTW (A)	4	A	A4

Title/ Description	Offshore Transfer of Material (Ship to Platform)					GRA. No	FS-01-IMS03-001-B-036		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Jurgen Kerssen, Marcos Figueira (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Offshore Transfer of Material (Ship to Ship)					GRA. No	FS-01-IMS03-001-B-037		
Reference Source	Code of safe working practices, chapter 31		IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule	Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Internal Preparation	H: Inadequate crew familiarisation and knowledge about operation H: Failure of Power Management and start up H: Operations insufficiently planned and coordinated H: Adverse weather H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Poor planning leading to accident during operations	Crew Involved the Operation	2	D	D2	1. Check stability and ballast the vessel as required prior to the lifting, to avoid excessive list (En) 2. Follow procedures and checklist when starting equipment (A) 3. Comply with PTW procedure (A) 4. Competent, Certified, Experienced crew to perform the job (A) 5. Supervisor of the operation to be established (A) 6. Lift Plan available (A) 7. TBT Prior Operation (A) 8. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 9. All personnel involved to comply with cultural awareness and no harassment policy (A)	1	B	B1

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Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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						10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Comply with speak up policy (A) 12. FS-01-IMS15A-001 Lifting Operation understood and complied with (A) 13. Ensure crane is suitable and certified for offshore lifting (A) 14. Offshore crane to be maintained and in operations condition in line with manufacturer and PMS (A) 15. Comply with MOPO (A) 16. Weather conditions to be within required limits(A) 17. Weather forecast to be available and consulted (A) 18. Verify sufficient power is available for the use of crane (A) 19. Use of adequate PPE in line with PPE matrix (PPE)			
Emergency preparedness for	H – Loss of position H – Equipment failure H – Incompetent crew	Crew, 3 rd party	5	C	C5	20. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A	5	A	A5

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Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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potential emergency situation (Equipment failure, Blackout, Loss of position, Swell, MOB,Collision, etc.)	E - MOB E – Collision E – Damage to equipment E – List E – Capsize E - Death E – Injury					Emergency Response Checklists (A) 21. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 22. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 23. Emergency equipment is available and maintained as per PMS (A)			
External Preparation with Supply Vessel/Other Vessel Type	H: Inadequate crew familiarisation and knowledge about operation H: Failure of equipment, Power Management and start up H: Communication not established between parties involved H: Adverse weather	Own vessel, Supply Vessel/ Other Type Vessel (External)	3	D	D3	24. Establish safe zone and ensure surrounding traffic is monitored and does not enter the safe zone during the operations (I) 25. Vessel with crane operation need to be on DP mode or drift (En) 26. Establish communication and coordination between both vessel (UHF/VHF radio as agree) (En) 27. Competency of supply vessel/other vessel crew, experience to perform the job (A) 28. External vessel to be compliant with Fugro standard and pass	2	B	B2

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Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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	E: Poor planning leading to accident during operations					through a procurement process (A) 29. Agree on appropriate approach and double banking/mooring arrangements (A) 30. Weather monitoring, Follow the MOPO (A) 31. Confirm stability arrangements are in place for both vessels prior to starting the transfer (A) 32. Review lift plan and emergency escape routes (A) 33. Confirm all required lifting equipment, accessories and load are in working order and maintained (A)			
Approach and double bank alongside	H: Unsafe approach H: Mooring/double banking failure H: Manual Handling H: Environmental/weather Condition	Own vessel, Supply Vessel/ Other Type Vessel (External)	4	C	C4	Control measures 1 to 33, as applicable 34. Approach at safe speed (En) 35. Use mooring lines that are certified and in good condition (En) 36. Use of appropriate fendering (En)	4	A	A4

Title/ Description	Offshore Transfer of Material (Ship to Ship)					GRA. No	FS-01-IMS03-001-B-037		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
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	H: Working close to the sides H: Misunderstood communications H: Machinery failure E: Injury, Fatality E: Man over board E: Damage to vessel and equipment					37. Maintain clear communication between the 2 vessels (En) 38. Test machinery and equipment prior approach (A) 39. Mooring as per plan (A)			
Lifting Operations / Crane Operations	H: Not following lift plan H: Incorrect, improper fastening of the load H: Dropped object H: Uncontrolled motion of crane blocks and cargo H: Equipment failure or defective H: SIMOP H: Pinch points H: Manual Handling H: Environmental Condition	Own vessel, Supply Vessel/Other Type Vessel (External)	5	D	D5	Control measures 1 to 33, as applicable 40. Barricade the area (I) 41. Allow in the area only the personnel involved in the operation (I) 42. Tag Lines provided to hook and control the lifted cargo (En) 43. Maintain good communication between both vessel (En) 44. Lifting team members in position as per plan (A) 45. Following Lift Plan (A) 46. Never exceed SWL (A)	4	B	B4

Title/ Description	Offshore Transfer of Material (Ship to Ship)					GRA. No	FS-01-IMS03-001-B-037		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule		Safe Mechanical Lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	H: Working close to the sides H: Mooring/double banking failure E: Injury, Fatality E: Man over board E: Listing of Vessel E: Damage to vessel and equipment E: Environmental pollution					47. Lifting gears have the correct colour code and valid certificates, Inspect prior use. (A) 48. Follow strictly the equipment manufacturer's instructions (A) 49. Monitor weather throughout the operation (A) 50. Monitor position of vessel and mooring arrangements (A) 51. Apply SLAM (A) 52. Stop the job if necessary (A) 53. Ensure appropriate tool and PPE are used (PPE)			
Offshore lift completion	H: Slips, Trips and Falls H: Poor Housekeeping E: Injury E: Equipment damage	Lift team	2	C	C2	54. Clear work area of obstructions and barriers (E) 55. Report and shut down procedures for equipment followed. (En) 56. Check equipment and accessories used for wear and tear, before storing and stowing (A) 57. Store equipment back on proper locations (A) 58. Inspect cargo for damages (A)	2	B	B2

Title/ Description	Offshore Transfer of Material (Ship to Ship)					GRA. No	FS-01-IMS03-001-B-037		
Reference Source	Code of safe working practices, chapter 31	IMS Procedure	FS-01-IMS15A-001 Lifting Operations FS-01-IMS14-001 Deck Procedures		Life Saving Rule	Safe Mechanical Lifting			
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Cast off	H: Unsafe cast off H: Manual Handling H: Environmental/weather condition H: Working close to the sides H: Misunderstood communications H: Machinery failure E: Injury, Fatality E: Man over board E: Damage to vessel and equipment	Own vessel, Supply Vessel/ Other Type Vessel (External)	4	B	B4	59. Depart at safe speed (En) 60. Retrieve fendering only after vessels are at safe distance (En) 61. Maintain clear communication between the 2 vessels (En) 62. Test machinery and equipment prior departure (A) 63. Let go of mooring lines as per agreed plan (A) 64. Close out PTW (A)	4	A	A4
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Eko Adi Priyono (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Personnel transfer boat selection and assurance	H: Hired boat crew have inadequate familiarisation and knowledge about operation H: Selection of uncertified / unsuitable boat H: Operations insufficiently planned and coordinated H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Poor planning leading to accident during operations E: Equipment failure leading to accident during operations	Crew Involved the Operation	3	D	D3	1. Use of the FRC or MOB boat for transfer is not allowed (E) 2. Plan transfers alongside in port, or alternative less hazardous means if reasonably practicable (S) 3. Only if no other safer means of transfer is feasible, as identified in a TRA, is it allowed to transfer by boat (S) 4. Boat selected for transfers must comply with requirements indicated in FS-03-IMS14-001 chapter 6 (En) 5. Freeboard of the transfer boat to be compatible with vessel freeboard (En) 6. External boat to be compliant with Fugro standard and pass	2	B	B2

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium</div> <div>low</div>			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium</div> <div>low</div>
						through a procurement process (A) 7. Boat to be compliant with Class and international requirements, as applicable (A) 8. Boat maintenance to be up to date with PMS (A) 9. Transfer boat weather limits, capacity and suitability to conduct safe transfer operations as required to be known and in line with planned transfer (A) 10. MOB rescue/emergency plan available (A) 11. Competent, certified, experienced crew to perform the job (A) 12. All personnel involved to comply with cultural awareness and no harassment policy (A) 13. All crew involved shall be fit for work. Take in account crewmember capabilities,				

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						limitations, mental health, physical health limitations. (A) 14. Plan work schedule and regular breaks, comply with work and rest hours (A) 15. Comply with speak up policy (A) 16. Sufficient LSA, FFE, drinking water and fuel for the trip + contingency on the transfer boat (A) 17. Sufficient crew on the transfer boat to handle manoeuvring, assisting with the transfer and handling luggage / cargo (A)			
Internal Preparation	H: Inadequate crew familiarisation and knowledge about operation H: Loss of control of propulsion H: Operations insufficiently planned and coordinated H: Adverse weather	Crew involved the operation	2	D	D2	18. Life ring stand-by (En) 19. Suitable fendering arrangement are made available and suitable for the transfer system used. (En) 20. FRC / MOB boat ready for use (A) 21. Follow boat to boat transfer procedure and applicable checklist (A)	1	B	B1

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E: Poor planning leading to accident during operations					22. Comply with PTW procedure and ensure TRA is available for the specific operation (A) 23. Competent, certified, experienced crew to perform the job (A) 24. Joining personnel to be provided with TRA and procedure in advance (A) 25. Supervisor of the operation to be established (A) 26. TBT prior operation (A) 27. Ensure any embarkation ladder used is suitable and certified for purpose (A) 28. Used embarkation ladder to be maintained and in operations condition in line with manufacturer and PMS (A) 29. Comply with MOPO (A) 30. Weather conditions to be within required limits(A) 31. Weather forecast to be available and consulted (A)			

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						32. Transfer in daylight and with sufficient visibility only (A) 33. Ladders and swing ropes inspected before use (A) 34. Use of adequate PPE in line with PPE matrix (PPE) 35. Transferring personnel wear a survival suit if water temp is below 15°C (PPE) 36. All assisting personnel wear work vests as a minimum (PPE)			
Emergency preparedness for potential emergency situation (Equipment failure, Blackout, Loss of position, Collision, Weather condition, MOB, etc.)	H – Loss of position H – Equipment failure H – Incompetent crew E – Collision E – Damage to equipment E - Death E – Injury E - MOB	Crew, 3 rd party	5	C	C5	37. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 38. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 39. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A)	5	A	A5

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						40. Emergency equipment is available and maintained as per PMS (A)			
Coordination with transfer boat and approach	H: Inadequate crew familiarisation and knowledge about operation H: Failure of equipment H: Communication not established between parties involved H: Not following agreed plan H: Adverse weather E: Poor planning leading to accident during operations	Own vessel, Transfer boat (External)	4	C	C4	41. If anchored use a thruster to create lee if required (I) 42. Fendering arrangement confirmed in place (En) 43. Embarkation ladder suitably rigged and secured for operations (En) 44. Agree on approach, speed, heading, holding position arrangements to ensure smooth transfer of personnel (En) 45. Captain of both vessels on their bridge / manoeuvring station (A) 46. Communication established before vessel coming alongside (A) 47. Transfer vessel must be stable alongside before the transfer starts either with ropes or using thrusters depending on the	3	B	B3

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E = Elimination S = Substitution I = Isolation En = Engineering Controls A = Administration PPE = Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						manoeuvrability of the transfer vessel (A) 48. Confirm with personnel transferring that they are familiarised with operation and agree to proceed (A) 49. Transferring personnel don't carry bag packs or luggage when transferring (A) 50. Pre-operation machinery checks are completed and satisfactory (A) 51. Weather monitored continuously (A)			
Personnel transfer	H - Man overboard, H – Boat to boat damage, H - Weather, H - Pinch points H – Slips trips and falls E - Injury/fatality (Drowning, hypothermia, crushed body parts)	All personnel in the small craft Personnel assisting	4	C	C4	Control measures 1 to 51, as applicable 52. Monitor weather and stop operations if exceeding limits (E) 53. Clear landing area as soon as transferred (I) 54. Use ladder and swing ropes appropriately (En)	4	B	B4

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E – Damage to vessel/boat/equipment					55. Time the transferring when the transfer boat is on the top of the wave (A) 56. Don't rush the transfer and wait for a suitable moment (A) 57. Anyone can refuse a transfer if they feel uncomfortable to do it safely (A) 58. Personnel must remain seated and not move around to prevent capsizing, follow instructions of crew (A) 59. Keep all body parts inboard (A)			
Transfer of luggage	H - Man overboard H - Lifting equipment over water H - Manual handling H – Environmental pollution if luggage is dropped at sea E - Injury, fatality E - Loss of equipment, luggage or stores E - Pollution	Deck crew	4	B	B4	Control measures 1 to 51, as applicable 60. Consider If the transfer can be done by manual handling or alternative lifting equipment or offshore crane need to be used. If equipment is used for the transfer, refer to GRA "Offshore Transfer- Materials" (S)	3	A	A3

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure	FS-01-IMS14-001 Deck Procedure		Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. <div>high</div> <div>medium or low</div>
						61. Items taken on board from behind bulwark or railing if practicable (I) 62. If manual handling is required, verify size shape and weight is suitable (A) 63. Don't over-reach but wait until the boat is properly alongside (A) 64. Continue to monitor weather and only transfer when practicable (A) 65. Use harness when handling items without protection from bulwark or railing (PPE)			
Cast off and securing operations	H: Unsafe cast off H: Manual Handling H: Environmental/weather condition H: Working close to the sides H: Misunderstood communications H: Machinery failure E: Injury, Fatality	Own vessel, Transfer boat (External)	4	B	B4	66. Maintain clear communication between the 2 vessels (En) 67. Depart at safe speed (En) 68. Retrieve fendering only after vessels are at safe distance (En) 69. Retrieve embarkation ladder and properly store away (A) 70. Let go of mooring lines as per agreed plan, if applicable (A)	4	A	A4

Title/ Description	Offshore Transfer of Personnel - Boat to Boat					GRA. No	FS-01-IMS03-001-B-038		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E: Man overboard E: Damage to vessel and equipment					71. Test machinery and equipment prior departure (A) 72. Secure embarkation area (A) 73. Close out PTW (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Bart Metman (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)				Location	FS	Rev. No	01
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		

Generic Risk Assessment

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Access preparation	H: Improper preparation, unclear instructions H: Incorrect selection of ladder/gangway H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Unsafe access to vessel E: Unsafe rigging operation E: Gangway failure	Personnel transiting gangway	3	C	C3	1. Ensure SWL of access means selected is sufficient for the planned operations (E) 2. When double banking, ensure gangway or access facility is rigged to safely land on adjacent vessel (no makeshift gangway) (I) 3. Verify obstructions that affects or may affect the safe access (I) 4. Ensure sufficient illumination is available for safe access in hours of darkness (En) 5. Assess port facility and establish best access means to vessel (A) 6. Coordinate with port authority on safe access rigging, if required (A) 7. Instruct personnel on required set up of vessel access (A) 8. Person performing task should be fit for work. Take in account	2	B	B2

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						crewmember capabilities, limitations, mental health, physical health limitations. (A) 9. All personnel involved to comply with cultural awareness and no harassment policy (A) 10. Plan work schedule and regular breaks, comply with work and rest hours (A) 11. Comply with speak up policy (A) 12. Check tide cycle and rig vessel access to remain within acceptable limits (A) 13. Ensure access means selected is maintained and certified as per PMS and manufacturer instructions (A)			
Emergency preparedness for potential emergency situation	H – Equipment failure H – Incompetent crew H – Traffic H – Swell H - List H – Weather condition H – Tide	Crew	4	C	C4	14. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	4	A	A4

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk	
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
(Equipment failure, MOB, Injury, etc.)	E - MOB E – Damage to equipment E - Death E – Injury					15. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 16. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 17. Emergency equipment is available and maintained as per PMS (A)			
Deploying, moving, rigging gangway or access means in position	H: Uncontrolled movement during lift H: Slips trips and falls H: Pinch points H: Incorrect rigging E: Injury E: Fall overboard or on quay	Personnel rigging and transiting gangway	4	C	C4	Control measures 1 to 17, as applicable 18. For double banking, ensure crossing path through adjacent vessel until quay side is clearly marked (I) 19. Use barriers, traffic cones, reflective material or lights to create a safe area around the gangway (I) 20. Keep any personnel waiting to (dis)embark away from the work area (I)	3	B	B3

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						21. For double banking, ensure adjacent vessel access means to quay side is safe (En) 22. Use tag lines when lifting gangway (En) 23. Use properly certified lifting gear (En) 24. Rig access means as discussed during preparation. Gangway to be fitted as per guidelines, including net, stanchions and handrails. (En) 25. Assess safe method of transferring gangway to location (A) 26. Inspect gangway before lifting (A) 27. Properly qualified crane operator and banksman (A) 28. Inspect rigging including gangway net and confirm safe access, before start transiting (A)				

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040		
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						29. Life ring, MOB buoy available and ready for deployment in case of emergency (A) 30. PPE in line with matrix (PPE)			
Crossing the gangway (or other access means)	H: Failure of gangway H: Slip, trips, falls H: Movement of dockside roller due to ship movement. E: Injuries E: Damage to equipment	Crew Personnel boarding	3	C	C3	31. Access to gangway managed while vehicle traffic is ongoing near the landing area (E) 32. If suspected or observed overload or mechanical damage of gangway, isolate from use until recertified (E) 33. Any luggage that is unsuitable to be carried safely up the gangway to be lifted by crane. (S) 34. Gangway watchman to ensure people don't stand near gangway landing. (I) 35. Only transport cargo, luggage or materials across the gangway if it can be safely manually handled and within SWL of gangway (I) 36. Regular inspections during its use (A)	3	A	A3

Title/ Description	Safe Access in Port (Gangway, Embarkation Ladder, Double Bank)					GRA. No	FS-01-IMS03-001-B-040			
Reference Source	Code of safe working practices		IMS Procedure		FS-01-IMS14-001 Deck Procedure	Life Saving Rule		NA		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						37. Gangway watchman to monitor ongoing operations and ensure safe access is not hindered (A) 38. SLAM (A) 39. Gangway watchman to assist people where needed. (A) 40. Gangway watchman to monitor that gangway remains within its design limitations during tidal changes – not too steep/flat (A) 41. Stop the Job (A) 42. Personnel to wear closed footwear when embarking and disembarking (PPE)				
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00		
Evert van den Berg (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)			Location	FS	Rev. No	01		
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022		
					Next Review date	31 August 2023				

Generic Risk Assessment

Title/ Description						SIMOPS with Other Vessels	GRA. No	FS-01-IMS03-001-B-041		
Reference Source	Guidelines for the Safe Management & Operation of Offshore Support Vessels 2002		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Coordinating SIMOPS on board	H: Inadequate planning H: Inadequate coordination H: Poor communication H: Activities conflicting with each other H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E: Injury, Illness E: Vessel accident, downtime E: Equipment damage E: Environmental impact	Personnel involved in operations	4	D	D4	1. Consider if operations can be done without SIMOPS (E) 2. Establish and test communication means between all involved parties (En) 3. Comply with SIMOPS Procedure (A) 4. Follow PTW procedure, as applicable (A) 5. Comply with MOPO (A) 6. List of planned activities to be available before starting mobilisation /de-mobilisation, for coordination and overview (A) 7. Daily meeting to coordinate SIMOPS (A) 8. Check and monitor weather data (A)		4	B	B4

Title/ Description	SIMOPS with Other Vessels					GRA. No	FS-01-IMS03-001-B-041		
Reference Source	Guidelines for the Safe Management & Operation of Offshore Support Vessels 2002		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS14-001 Deck Procedure	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						9. Person appointed to coordinate SIMOPS (A) 10. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 11. All personnel involved to comply with cultural awareness and no harassment policy (A) 12. Plan work schedule and regular breaks, comply with work and rest hours (A) 13. Comply with speak up policy (A) 14. Stop the Job in case conflicts arise (A)			
Emergency preparedness for potential emergency situation	H – Weather condition H – Unsafe speed H – Incompetent crew H – Poor communication H – Poor planning H – Equipment failure	Crew, 3 rd party	5	C	C5	15. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A)	5	A	A5

Title/ Description						GRA. No	FS-01-IMS03-001-B-041		
Reference Source	SIMOPS with Other Vessels		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS14-001 Deck Procedure	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
(Collision, Blackout, MOB, etc.)	E – Collision E – Pollution E – Loss of equipment E - Death E – Injury E - MOB					16. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 17. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 18. Emergency equipment is available and maintained as per PMS (A)			
Coordinating vessel movements in and around the Company vessel	H: Heavy marine traffic H: Adverse weather H: Poor Communication H: Inadequate planning H: Inadequate coordination E: Injury, Illness E: Vessel accident, downtime E: Equipment damage E: Environmental impact	Personnel involved in operations	5	C	C5	Control measures 1 to 18, as applicable 19. Masters of both vessels to establish Safe Zone (I) 20. Support vessel not to enter safe zone of Company vessel until approved by Company vessel (I) 21. One vessel to be appointed as coordinator for surrounding traffic (A) 22. Keep appropriate lookout for surrounding traffic and	5	A	A5

Title/ Description	SIMOPS with Other Vessels					GRA. No	FS-01-IMS03-001-B-041		
Reference Source	Guidelines for the Safe Management & Operation of Offshore Support Vessels 2002		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS14-001 Deck Procedure	Life Saving Rule	Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						coordinate safe zone entry, transit and departure accordingly (A) 23. Support vessel work scope established (A) 24. Appropriate safe zone entry checks completed (A) 25. Emergency procedures and escape routes agreed (A) 26. Carry out emergency drills as appropriate (A) 27. SIMOPS related instruction to be handed over during watch/shift changes (A)			
Safe management and operations of support vessels	H: Adverse weather H: Poor Communication H: Inadequate coordination H: Activities conflicting with each other E: Injury, Illness	Personnel involved in operations	5	C	C5	Control measures 1 to 27, as applicable 28. Comply with "Guidelines for the Safe Management & Operation of Offshore Support Vessels 2002" (A)	5	A	A5

Title/ Description	SIMOPS with Other Vessels					GRA. No	FS-01-IMS03-001-B-041			
Reference Source	Guidelines for the Safe Management & Operation of Offshore Support Vessels 2002		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work FS-01-IMS14-001 Deck Procedure	Life Saving Rule		Work Authorisation		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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	E: Vessel accident, downtime E: Equipment damage E: Environmental impact					29. Prepare TRA for activities to be carried out between the 2 vessels (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Tommaso Perelli (Initial 2021)		Muru Palaney (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Domestic Cleaning and Storage					GRA. No	FS-01-IMS03-001-B-042			
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 23 – Food preparation and handling in Catering		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
General accommodation cleaning	H - Manual, physical work H – Hazards associated with handling chemicals H – Improper tools used H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimisation, etc.) E - Injury E – Contact with chemical products E – Slips trips fall	Personnel involved in activity	2	C	C2	1. Ensure not to leave unwashed residues of cleaning agents (E) 2. Handle and dispose of used cleaning equipment and agents appropriately (I) 3. Ensure correct body position, follow proper manual handling techniques when required (A) 4. Follow COSHH procedure when handling chemical products (A) 5. All personnel involved to comply with cultural awareness and no harassment policy (A) 6. All crew involved shall be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A)		2	A	A2

Title/ Description	Domestic Cleaning and Storage					GRA. No	FS-01-IMS03-001-B-042			
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 23 – Food preparation and handling in Catering		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire	
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk			
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating	
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)	
						7. Plan work schedule and regular breaks, comply with work and rest hours (A) 8. Every crew member has the right to refuse to work with Substances Hazardous to Health, comply with speak up policy (A) 9. Knowledge of chemicals, availability of SDS in appropriate language (A) 10. Use of appropriate tools and equipment for the area to be cleaned (A) 11. Place warning signs after leaving a wet surface (A) 12. Leave area in good order after cleaning, ensure good housekeeping is maintained (A) 13. Follow cleaning schedule and make appropriate records (A) 14. Hygiene inspection (A)				

Title/ Description	Domestic Cleaning and Storage					GRA. No	FS-01-IMS03-001-B-042		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 23 – Food preparation and handling in Catering	IMS Procedure	FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						15. Plan cleaning appropriately considering resting crew in accommodations (A) 16. Wear appropriate clothing and footwear (PPE)			
Emergency preparedness for potential emergency situation (Fire, Contaminations, burns, poisoning, skin irritations, eye irritations, etc.)	H – Fire Emergencies H – Health Emergencies H – Environmental Emergencies H- Incorrect use of substance H – Untrained personnel E – Death E - Injury/illness of personnel E – Damage to vessel E – Poisoning	Crew involved	4	C	C4	17. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 18. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 19. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 20. Emergency equipment is available and maintained as per PMS (A)	4	A	A4
Cleaning of galley and food	H: Food contamination, due to improper cleaning	All personnel	3	D	D3	Control measures 1 to 20, as applicable	3	B	B3

Title/ Description	Domestic Cleaning and Storage					GRA. No	FS-01-IMS03-001-B-042		
Reference Source	Code of Safe Working Practices for Merchant Seafarers OVMSA Chapter 23 – Food preparation and handling in Catering		IMS Procedure		FS-01-IMS03-001 Health & Safety at Work		Life Saving Rule		Line of Fire
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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preparation and storage areas	E: Foodborne illness	on board and all visitors				21. Immediately clean up spills or food residues (E) 22. Avoid food storage on floor (E) 23. Equipment dedicated for cleaning galley only (I) 24. During pest control fumigation follow protocols to segregate food and provisions, close galley until completed (I) 25. Pest control (A) 26. Maintain appropriate temperature during cleaning (En) 27. Prepare cleaning plan, use appropriate products and techniques (A) 28. Avoid use of high pressure washing (A)			
Receiving provisions	H - Manual handling H: Damaged, broken packaging H: Contaminated food	Galley staff Personnel helping with	2	C	C2	29. Do not create potential slips, trips and fall hazards when moving stores (E)	1	B	B1

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	H: Presence of microbes E: Foodborne Illness E: Personal injury	receiving provisions				30. Do not accept goods if the temperature is incorrect, the expiry date too close to consumption or if packages are open or damaged (E) 31. Unload and store frozen and chilled products first, maintain cold chain (I) 32. Never store any food items directly on deck (I) 33. Reliable supplier to be arranged via purchasing or agent (A) 34. Prepare the receiving area. No waste products in this area. Area is clean and well maintained (A) 35. Use the FIFO (First in = First out) principle when storing away received goods (A) 36. Goods must be traceable and clearly identifiable, if you do not trust it, refuse it! (A)				

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						37. Job preparation, hold TBT prior receiving stores, as required (A) 38. Good housekeeping (A) 39. Training: manual handling (A) 40. Stop the Job’ Policy (A) 41. Wear safety shoes and select PPE based on PPE Matrix (PPE)				
Storage	H: Cross contamination. H: Growth of microbes. H: Pests H: Stores not secured for sea E: Foodborne Illness, E: Personal injury, dropped object	All personnel on board and all visitors.	3	D	D3	42. Remove damaged packages (E) 43. Keep non-food and food separated (I) 44. Ensure segregation between dry stores and cold rooms (I) 45. Do not store any cleaning chemicals, even temporarily, near food/provision storage areas (I) 46. Stores to be organised to allow appropriate segregation between different types of food, to prevent incompatible provision to be stored together (I)		2	A	A2

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						47. Do not store food in front of cooling units (I) 48. Raw food must always be kept apart from cooked food or milk (I) 49. Raw food must be placed at the bottom and in a drip container if fluids may leak out (I) 50. Food that decays the fastest should be stored at the coolest part (I) 51. Cold rooms to be maintained and appropriately sealed to maintain the required temperature (En) 52. Pest control (A) 53. Comply with catering and housekeeping procedure (A) 54. Keep the deck and bulkhead free of products, allowing easy cleaning (A) 55. Cleaning schedule (A)				

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						56. Regular galley inspection (A) 57. Use the F.I.F.O. System in accordance with expiry dates where applicable (A) 58. Check expiry dates (A) 59. Temperature monitoring and logging of refrigerated compartments (A)				
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00	
Dennis de la Pena (Initial 2021)		Muru Palaney, Tommaso Perelli (Initial 2021)				Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022	
						Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Emergency Towing					GRA. No	FS-01-IMS03-001-B-044		
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Preparation for towing – Personnel	H – Human error H – Involved personnel inadequately briefed or instructed H – Inadequate communication established between vessels, language barrier H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Equipment damage E – Personnel injury	Own vessel crew Towing vessel crew	4	D	D4	1. Establish communication systems and backup between all parties (En) 2. Minimise manual handling, use of lifting equipment where possible (En) 3. Involved crew is familiarised with towing operation and with their individual task (A) 4. Regular drills and exercises as per Training Matrix (A) 5. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 6. All personnel involved to comply with cultural awareness and no harassment policy (A)	4	B	B4

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						7. Plan work schedule and regular breaks, comply with work and rest hours (A) 8. Comply with speak up policy (A) 9. Emergency towing procedure, booklet and related documents are followed (A) 10. Ensure proper supervision of the task (A) 11. Common language for communication established (A) 12. If manual handling is required, proper techniques to be used (A) 13. Consider crew work and rest hour to limit effects of fatigue, allow for frequent breaks (A) 14. SLAM exercised (A) 15. Proper PPE to be used for the task (PPE)			

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Preparation for towing – Selection of towing vessel and equipment	H – Tow vessel or tow equipment not maintained / certified H – Tow vessel or tow equipment inadequate for towing requirement H – Delayed availability of tow vessel E – Delays in executing tow E – Accident or injury due to poor execution of tow E – Equipment damage, vessel damage E – Reputation damage	Crew, tow crew, vessel, company	4	C	C4	16. Comply with procedure FS-01-IMS17-001 and related documents (A) 17. Comply with vessel specific emergency towing booklet (A) 18. Various authorities informed: Flag and Port States, Class, Owners, Insurance (A) 19. Select suitable towing company, that complies with required international maritime standards (A) 20. Towing company needs to have suitable and available towing vessel withing required notice period (A) 21. Tow vessel to be suitable for the required tow, be provided with required equipment, and comply with all applicable rules and regulations (bollard pull, HP, etc.) (A) 22. Develop standard TOWCON (A)	4	A	A4

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						23. If due to emergency, urgent arrangements are needed for tow, Master to comply with IMS procedure FS-01-IMS17-001 section 3.12.2 (A) 24. Involvement of underwriters in selection of tow company, ensure coverage (A)			
Emergency preparedness for potential emergency situation (Capsize, Collision, Injury, Equipment failure, etc.)	H – Slip, Trips & falls H – Pinch points H – Equipment Failure H – Incompetent crew H - Weather condition E – Damage to equipment E – MOB E – Injury E – Death E – Capsize E – Sinking E - Grounding	Crew, 3 rd party	5	C	C5	25. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 26. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 27. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 28. Emergency equipment is available and maintained as per PMS (A)	5	A	A5

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Preparation and planning for towing – environment and weather factors	H – Weather conditions H – Access of area where own vessel is located H – Hazard proximity of area where own vessel is located E – Vessel damage E – Personnel injury	Own vessel crew Towing vessel crew	4	C	C4	29. Adequate towing pattern agreed between both masters (E) 30. Ensure sufficient clearance from nearby traffic or structures for safe hook up of tow (I) 31. Adequate ballasting / de-ballasting as required (En) 32. Task conducted in daylight if possible, or with sufficient artificial illumination (En) 33. Weather forecast from trusted provider (A) 34. Stop work authority (A) 35. Create voyage plan including ports of refuge (A) 36. Up-to-date navigational charts and publications (A) 37. Consider weather predictions (able to cope with worse weather) when selecting tow vessel and equipment (A)		4	A	A4

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						38. Consider tidal changes and water depth available when planning for hook up (A)			
Approach and tow line connection	H - Collision between own vessel and towing vessel H - Collision with Nav aid or berth H – Grounding H – Equipment failure (own vessel propeller shaft) H – Slips trips falls H – Manual handling E – Personnel injury E – Damage to own ship equipment (shafts, rudders) E – Damage to own vessel E – Damage to vessel rendering assistance	Own vessel crew Towing vessel crew	5	C	C5	Control measures 1 to 38, as applicable 39. Propeller shaft(s) locking (E) 40. Rudder(s) operated or locked in midship position as agreed with tow master (E) 41. Tow lines through Panama fairleads avoiding stand rollers (E) 42. Tow lines never connected directly to a winch drum but always to mooring bits. (E) 43. Crew to depart from station before tension applied to the towing line (I) 44. Certified and regularly inspected equipment cover in PMS (En) 45. Suitable fendering arrangements in place as needed (En)	5	B	B5

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						46. Use of line throwing devices to pick up messenger line and increase distance between own and towing vessel when connecting tow line (En) 47. Hooking of tow line as per agreed tow pattern (En) 48. Own ship water integrity inspected and confirmed before towing commence (En) 49. Masters information exchange (initial contact between masters sharing towing booklet including ship’s particulars, towing form and checklist) (A) 50. Thorough TBT with forecastle deck crew to understand duties, procedure for tug line connection and safety precautions including weather conditions affecting operations (A) 51. Towing vessel position discussed between masters to			

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						allow safe approach and passing tow (A) 52. Towing survey arranged, if possible, in agreement with underwriters (A) 53. Good housekeeping of towing station (A)			
Towing Operations	H – Equipment failure (tow line parting) H – Equipment failure (tow vessel engine failure) H – Collision with other vessels H - Environmental conditions H – Human error H – Collision H – Grounding E - Personnel injury E – Equipment damage E – Vessel loss E – Single/multiple fatality	Own vessel crew Towing vessel crew	5	D	D5	Control measures 1 to 53, as applicable 54. Regular towing line grease up to prevent wear of ropes in chocks (E) 55. Avoid exceed the SWLs ropes, bits and fairleads, reduce towing speed if weather deteriorates (E) 56. “Clear deck” operation whenever possible (E) 57. Consider adding additional tow lines if weather deteriorates (S) 58. Watertight doors remain closed (En)	5	B	B5

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Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						59. Appropriate lights / shapes displayed in accordance with COLREGS (A) 60. Update AIS information (A) 61. Rules of the road applied in accordance with COLREGS (A) 62. Various authorities kept up to date with operation progress: Flag and Port States, Class, Owners, Insurance (A) 63. Maintain appropriate lookout on bridge and constant monitoring of tow arrangement (A) 64. Ensure to keep accurate recordings in appropriate log books (A) 65. Maintain close communication with tow vessel (A) 66. Survival crafts ready for immediate use (PPE)			
Completion of towage and release	H - Collision between own vessel and towing vessel	Own vessel crew	5	C	C5	Control measures 1 to 53, as applicable	4	B	B4

Title/ Description	Emergency Towing					GRA. No	FS-01-IMS03-001-B-044		
Reference Source	Code of safe working practices	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule	Line of Fire			
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
of tow vessel and equipment	H - Collision with Nav aid or berth H – Grounding H – Equipment failure H – Slips trips falls H – Manual handling H – Communication failure H – Unclear roles and responsibilities E – Personnel injury E – Damage to own ship equipment E – Damage to own vessel E – Damage to vessel rendering assistance	Towing vessel crew				67. Ensure towed vessel is secured alongside berth or at anchorage prior release of tow lines (En) 68. Sequence of release of tow equipment to be agreed and followed (A)			
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
D. Buda / K. Brown / P. Kolodziejski (Initial 2022)		Muru Palaney / Tommaso Perelli (Initial 2022)			Location	FS	Rev. No	01	
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
Planning of Fire Drill	H-Insufficient drill planning. H-Misunderstanding of instructions and procedures, H-Unaware of upcoming drills, unscheduled drills H-Crew and other personnel unfamiliar with the drill and emergency procedure. H-Equipment not maintained or previously inspected. H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E-Drill schedule, legal requirements not followed.	All personnel on board for drill.	1	C	C1	<ol style="list-style-type: none"> 1. Planned means of communication and backup comms (En) 2. Competent and knowledgeable personnel to plan drill. (A). 3. Drill carried out as per PMS drill matrix. (A). 4. Fire-fighting equipment to be maintained as per PMS and manufacturer instructions (A). 5. Drill scenario to be in line with PMS drill instructions (A). 6. Muster list to be in line with latest crew list (A) 7. Crew familiarization with muster duties (A) 8. Visitor and contractor induction on emergency response (A). 	1	A	A1

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)		From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
	E-Ineffective drill due to interference of operations. E-Incorrect drill execution leading to accidents and/or non-compliance. E-Equipment damage.					9. Only trained crew assigned to fire-fighting duties. (A) 10. All crew involved shall be fit for work. Take in account crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 11. All personnel involved to comply with cultural awareness and no harassment policy (A) 12. Plan work schedule and regular breaks, comply with work and rest hours (A) 13. Comply with speak up policy (A) 14. Specific training should be given on all new items of firefighting equipment (A) 15. Operational schedule checked so drill can be conducted effectively (A) 16. Clear chain of command to be established and known (A)			

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Emergency preparedness for potential emergency situation (Injury, Slips, Trips & Falls, Equipment failure, etc.)	H – Slip, Trips & falls H – Pinch points H – Equipment Failure H – Incompetent crew E – Damage to equipment E - Fire E – Injury	Crew on board	3	C	C3	17. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 18. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 19. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 20. Emergency equipment is available and maintained as per PMS (A)	3	A	A3
Mustering at dedicated stations	H – Crew unfamiliar with muster station H – Muster station not maintained, obstructed H – Ineffective alarms E – Time delays in mustering E – Unaccounted personnel	All personnel on board	2	C	C2	21. Familiarisation on arrival of new personnel (E) 22. Emergency alarms tested as per PMS (En) 23. Muster station clearly labelled (A)	2	A	A2

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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						24. Muster station maintained and checked during safety rounds (A) 25. Emergency escape signs clearly posted and visible (A) 26. Muster list maintained up to date (A) 27. Carry out drills before departure as required by SOLAS (A) 28. Up to date fire and safety plans posted in alleyways (A) 29. Maintain log and records of drill for debrief session (A)			
Firefighting team(s) preparation	H – Improper donning of equipment H – Slips, Trips, Falls H - Improper rigging of fire hoses H – Unfamiliarised crew with fire-fighting equipment operations E – Wasting valuable time	Fire Team and assistants	2	C	C2	Control measures 1 to 29, as applicable 30. Use of emergency lighting, as required (En) 31. BA set pressure and alarms to be verified and tested (En) 32. Suitably trained and medically fit personnel to be assigned as fire fighters (A) Take in account	2	A	A2

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	E - Possible equipment damage E - Injuries					crewmember capabilities, limitations, body weight, body size, mental health, physical health limitations. (A) 33. Checks by team leader that operators are correctly equipped and protected (A) 34. Supporting team members to assist with donning and with setting up firefighting equipment (A) 35. Regular fire drills as per schedule (A) 36. Vessel specific firefighting checklist is available for main critical fire risk areas, to guide team to set up firefighting equipment as efficient as possible (A) 37. Good housekeeping practices (A) 38. Fireman's Outfits to be worn (PPE)			

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
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Fire Fighting operations	H – Inadequate visibility H – Improper firefighting medium used for type of simulated fire H – Fatigue H – Bad Comms H – Fire located in electrical space H – Improper use of equipment H – Slips, Trips, Falls E – Confusion, misdirection E – Ineffective response to fire E – Personal Injury E – Panic / losing personal control E – Electrocution E – Equipment damage during drill	Fire team	3	C	C3	Control measures 1 to 38, as applicable 39. If firefighting requires extensive times, backup team to be available and ready to rotate (S) 40. Isolate electrical equipment as part of the drill where affected (I) 41. Ensure all comms have been suitably checked and tested prior attacking fire (En) 42. Practice coded lifeline pulls for effective rescue/evacuation (En) 43. Communicate instructions clearly before commencement (A) 44. Use appropriate checklist and fire and safety plan to coordinate efforts (A) 45. Regular hydration (A)	2	B	B2
Fire Fighting	H – Supporting operations not effective	Support team	2	C	C2	Control measures 1 to 38, as applicable	2	A	A2

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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supporting operations	(i.e boundary cooling, ventilation control, isolation and clearing of area and surroundings, etc.) E – Inadequate or ineffective firefighting operations					46. Isolate area and surroundings, and remove any dangerous materials that could impair firefighting operations (I) 47. Support team briefed and trained in roles and responsibility (A) 48. Team familiar with ventilation system and its operations and locations (A) 49. Coordination with team leader to provide cooling in appropriate areas (A)			
First aid, handling injured personnel during firefighting,	H – Untrained crew to provide first aid H – Team not ready to collect injured personnel H – Medical equipment not maintained H – Hospital access obstructed, lack of access to medical resources H – Ineffective contact with shore medical support	First aid team, IP	2	C	C2	Control measures 1 to 29, as applicable 50. Grab bag or alternative medical arrangements established and known (S) 51. Access to hospital not obstructed (I) 52. Trained first aiders to be part of team(A)	2	A	A2

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule	N/A			
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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	H – Inappropriate recovery of IP from scene H – Manual handling H – Equipment failure E – Delays in medical intervention E – First aiders get injured during recovery process E – Ineffective medical intervention					53. Hospital and medical equipment well maintained (A) 54. Shore medical support contact details readily available (A) 55. Proper manual handling techniques (such as lifting stretcher) (A) 56. Coordination with firefighting team leader for safe recovery of IP from scene (A)			
Securing area, end of drill	H – Slips trips falls H – Poor housekeeping H – Ineffective debriefing H - Equipment not demobbed properly E – Injury E – Lack of effective lessons learned E – Equipment loss or damage	All participants	2	B	B2	57. Repair/replace/maintain/ refill /clean/service all used equipment (En) 58. Maintain awareness (A) 59. Maintain log and records of drill for debrief session (A) 60. Discuss and record lessons learned (A)	1	A	A1
Assessor's Name(s)		Reviewers Name(s)			Date	1 September 2022	Time	08:00	
Stephen Comfort (Initial 2022)		Muru Palaney / Tommaso Perelli (Initial 2022)			Location	FS	Rev. No	01	

Title/ Description	Drill Training - Fire Fighting Operations					GRA. No	FS-01-IMS03-001-B-045		
Reference Source	SOLAS	IMS Procedure	FS-01-IMS17-001 Emergency Response Manual		Life Saving Rule		N/A		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)			Approval	Julia Korpak	Date	1 September 2022	
					Next Review date	31 August 2023			

Generic Risk Assessment

Title/ Description	Liferaft Exchange for Inspection and Maintenance					GRA. No	FS-01-IMS03-001-B-046		
Reference Source	Code of safe working practices, LSA Code	IMS Procedure	IMS 12A Critical and Priority Equipment SOLAS training manual		Life Saving Rule		Safe mechanical lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls	D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.	Potential Severity	Likelihood of Occurrence	Risk Rating
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Planning of liferaft exchange	H – Insufficient manpower H – Inadequate / insufficient Lighting H - Misunderstanding procedure / task H – Availability of shore-based crane H – Lack of dock space H – SIMOPS interfering with liferaft exchange H – Adverse weather conditions H: Poor mental health of crew involved H: Unfavourable work environment (stress, victimization, etc.) E – Confusion, incorrect job preparation leading to failure during execution E – Delays in operation	Crew, external personnel	2	C	C2	1. Extra lighting if required (En) 2. PMS will ensure regular / frequent maintenance is completed on liferafts / associated equipment (A) 3. Plan exchange of liferafts in due time to ensure exchange units are available before starting the operation (A) 4. Decide what resources and tools, including shore crane, transportation and shore support are needed for the job, and confirm availability (A) 5. Vessel berthed at suitable location with sufficient quay side space to accommodate for the operation (A)	2	A	A2

Title/ Description	Liferaft Exchange for Inspection and Maintenance					GRA. No	FS-01-IMS03-001-B-046			
Reference Source	Code of safe working practices, LSA Code		IMS Procedure		IMS 12A Critical and Priority Equipment SOLAS training manual	Life Saving Rule		Safe mechanical lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
Separate the job into individual tasks and record in sequence.	Describe all hazards identified and their effects for each task (from Hazard ID checklist and based on observations and experience). Note: Additional hazards may be caused by interaction with other work.	Name all types of personnel at risk. Remember to include people outside the work party who may be affected.	From matrix, identify consequence with no controls in place for each hazard. (1-5)	From matrix, identify likelihood with no controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)			From matrix, identify consequence with controls in place for each hazard. (1-5)	From matrix, identify likelihood with controls in place for each hazard. (A-E)	Classify risk rating from matrix for each hazard. (high, medium or low)
						6. If mechanical lifting is to be performed, refer to mechanical lifting GRA (A) 7. Ensure simultaneous operations are not interfering, proper coordination between parties required (A) 8. Complete PTW (WAH) if required – involved personnel to read and sign, including any shore-based labour (A) 9. Complete PTW (crane operations) paperwork if required - involved personnel to read and sign, including shore-based labour (A) 10. If using a crane (including if using shore crane), ensure certification is valid, crane maintained as per PMS, crane driver certified, and crane WLL is sufficient (A)				

Title/ Description	Liferaft Exchange for Inspection and Maintenance					GRA. No	FS-01-IMS03-001-B-046			
Reference Source	Code of safe working practices, LSA Code		IMS Procedure		IMS 12A Critical and Priority Equipment SOLAS training manual	Life Saving Rule		Safe mechanical lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						11. Ensure there are sufficient people for the operation. (A) 12. Use only competent / trained personnel (A) 13. Person performing task should be fit for work. Take in account crewmember capabilities, limitations, mental health, physical health limitations. (A) 14. All personnel involved to comply with cultural awareness and no harassment policy (A) 15. Plan work schedule and regular breaks, comply with work and rest hours (A) 16. Comply with speak up policy (A) 17. TBT with involved personnel to ensure everybody is fully/ clearly briefed on operation. Include shore-based labour. Reminder of “stop the job” policy (A)				

Title/ Description	Liferaft Exchange for Inspection and Maintenance					GRA. No	FS-01-IMS03-001-B-046			
Reference Source	Code of safe working practices, LSA Code		IMS Procedure		IMS 12A Critical and Priority Equipment SOLAS training manual	Life Saving Rule		Safe mechanical lifting		
Tasks	A: Hazard		B: Initial Risk			C: Controls		D: Residual Risk		
	Hazard Description and Effect	Personnel at Risk	Potential Severity	Likelihood of Occurrence	Risk Rating	Describe fully all controls applicable for each hazard. Control measures must be listed according to Hierarchy of Controls as follows E= Elimination S=Substitution I = Isolation En=Engineering Controls A= Administration PPE=Personal Protective Equipment. All controls must be valid in that they reduce severity, likelihood or both.		Potential Severity	Likelihood of Occurrence	Risk Rating
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						18. Ensure weather conditions and predictions are suitable for operation (A) 19. Read through HRU assembly instructions for refresher, if necessary, prior to removing (A)				
Emergency preparedness for potential emergency situation (Injury, Slips, Trips & Falls, Equipment failure, etc.)	H – Slip, Trips & falls H – Pinch points H – Equipment Failure H – Drop object H – Incompetent crew E – Damage to equipment E – MOB E – Injury E - Death	Crew, 3 rd party	4	C	C4	20. Follow the appropriate emergency response checklist Appendix FS-01-IMS17-001-A Emergency Response Checklists (A) 21. Adhere to FS-01-IMS17-001 Emergency Response Manual (A) 22. Crew to be trained to respond to emergency by participating in drills as per drill matrix and planned jobs (A) 23. Emergency equipment is available and maintained as per PMS (A)		4	A	A4

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Liferaft exchange preparation	H – Possible WAH/ close to side of ship H - Incorrect use of hand tools / dropped tools H – Vessel Movement due to weather and seas, slips, trips, falls H – Incorrect handling of equipment, including manual handling H – Unexpected release of liferaft from case E – Injury to personnel, fatality E – Damage to life raft / bridle / cradle E – Dropped objects (if elevated work area) E – Damage to Equipment	Crew, external personnel	4	C	C4	24. Segregate area below lift, only authorised personnel allowed in the lift area (I) 25. Secure tools with lanyards when working near sides (En) 26. Secure liferaft with lifting straps prior to loosening cradle/ senhouse slip (En) 27. Establish communication with lifting team members, and are positioned in correct location prior starting any operations (A) 28. Follow manufacturer instructions for unsecuring liferaft from cradle prior to lift (HRU, lifeline) (A) 29. Ensure to safely store small parts including HRU (A) 30. Maintain ergonomic body position when working on liferaft (A)		3	A	A3

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						31. Maintain good lifting / handling techniques (A) 32. Use PPE as required (PPE) 33. Use of fall arrest equipment when working near unprotected side (PPE)			
Unloading liferaft off the ship for maintenance	H - Falling objects H – Uncontrolled load during lift H – Incorrect lifting or handling techniques H – Weather conditions, wind H – Unexpected release of liferaft from case H – Miscommunication between team members E – Injury to personnel, fatality E - slips, trips, falls E – Damage to equipment / Accidental Inflation	Crew, external personnel	4	C	C4	Control measures 1 to 33, as applicable 34. Evenly distribute load within slings (En) 35. Use slings of sufficient size for lift (En) 36. Stop the job policy (A) 37. Ship's position in relation to crane, clear "line-of-sight" (A) 38. Follow all guidelines, procedures and instructions in WAH PTW, crane operations PTW and company guidance literature (A) 39. Use taglines to guide (A) 40. Monitor weather conditions (A)	4	A	A4

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Loading and securing maintained liferafts onto ship	H - Falling objects H – Uncontrolled load during lift H – Incorrect lifting or handling techniques H – Weather conditions, wind H – Unexpected release of liferaft from case H – Miscommunication between team members	Crew, external personnel	4	C	C4	Control measures 1 to 33, as applicable		4	A	A4
	E – Injury to personnel, fatality E - slips, trips, falls E – Damage to equipment / Accidental Inflation					41. Use slings of sufficient size for lift (En) 42. Evenly distribute load within slings (En) 43. Undo any securing from truck (En) 44. Proper lashing of liferafts back on rack as per manufacturer instruction (En) 45. Stop the job policy (A) 46. Ensure HRU is valid before securing to the liferaft lashing (A) 47. Use taglines to guide (A) 48. Ship’s position in relation to crane, clear “line-of-sight” (A) 49. Follow all guidelines, procedures and instructions in WAH PTW, crane operations PTW and company guidance literature (A)				

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						50. Ensure proper certification is provided for the loaded liferafts (A) 51. Monitor weather conditions (A)			
Assessor's Name(s)		Reviewers Name(s)				Date	1 September 2022	Time	08:00
Stephen Comfort (Initial 2022)		Muru Palaney / Tommaso Perelli (Initial 2022)				Location	FS	Rev. No	01
Marino Buselic, Vijay Mundath (Review 2022)		Tommaso Perelli, Muru Palaney (Review 2022)				Approval	Julia Korpak	Date	1 September 2022
						Next Review date	31 August 2023		